To Seminar Participants: I am looking forward to the seminar and to your comments. This paper is still in draft. It also is written for both a general law and economics and a legal audience and thus does not have a formal model. It relies on an informal signaling model.

Jennifer Arlen

DOES CONVICTION MATTER?
THE REPUTATIONAL AND COLLATERAL EFFECTS OF CORPORATE CRIME

Cindy Alexander and Jennifer Arlen

Abstract

US prosecutors regularly enter into corporate deferred and non-prosecution agreements (DPAs) with firms with detected criminal misconduct. Critics of this practice claim that prosecutors mute the reputational damage costs imposed on firms when they resolve cases through DPAs instead of requiring corporations to plead guilty. In their view, formal conviction enhances deterrence by supplementing financial penalties with enhanced reputational penalty for corporate crime.

We evaluate whether the choice to convict the firm instead of imposing a DPA affects the reputational damage cost impose on a firm by a criminal settlement, all else equal (including the firm, firm, charges, and sanctions imposed). Firms incur reputational damage costs when news of a criminal settlement leads interested third-parties—suppliers of goods, services or capital; customers; or lenders—to be less willing to deal with a sanctioned firm on favorable terms because of an increase in the perceived risk of future harm. We find that the reputational damage cost of a corporate criminal settlement depends on whether the crime harmed counter-parties and whether other facts revealed by the settlement reveal the firm presents a heightened risk of misconduct. These facts include quality of pre-crime and post-crime internal controls, managerial involvement in either the crime or its detection, post-crime governance reforms, and reforms mandated by prosecutors.

We find that the choice of settlement form—conviction versus DPA—affects reputational damage costs only if the decision to convict reveals additional information about the firm's riskiness. We consider and reject possible avenues—direct information, prosecutorial signaling, and managerial signaling. We reject direct revelation because plea and DPA agreements can contain the same facts about the crime and internal governance, and impose the same sanctions and mandates. Prosecutors' and managers' choices whether to enter into a plea or DPA will not provide a signal about the firm's risk because the decision whether to convict is predicated on factors unrelated to the risk of future misconduct. Finally, we conclude that conviction should not produce a heightened reputational sanction because, regardless of the form of settlement, firms take actions post-crime, both voluntarily and as directed by prosecutors, to materially reduce the risk of future wrongdoing—such as replacing management, reforming governance and hiring a monitor. Thus, the firm that emerges after conviction or DPA can have materially risk of misconduct than at the time of the crime. Corporations have equal ability to undertake such measures whether convicted or not and prosecutors have equal ability to require them.

DOES CONVICTION MATTER?
THE REPUTATIONAL AND COLLATERAL EFFECTS OF CORPORATE CRIME

Cindy Alexander[*] and Jennifer Arlen[**]

1. Introduction

In the United States corporations can be held criminally liable for all of their employees crimes committed in the scope of employment.[1] Liability extends to for crimes by managers and low level employees alike; liability can be imposed even if the wrongdoer violated orders[2] and the firm had an effective compliance program.[3] Notwithstanding broad authority to convict firms, federal prosecutors often do not convict publicly-held firms for their employees' crimes. DOJ policy encourages prosecutors to use pretrial diversion agreements to sanction firms for their employees' crimes in certain circumstances.[4] These agreements take two distinct forms: deferred prosecution agreements (DPA) and nonprosecution agreements (NPA). Under a DPA, the prosecutor files criminal charges but agrees not to seek conviction so long as the firm satisfies the terms of the agreement. Under an NPA, the prosecutor agrees not to charge the firm so long as it satisfies the agreement. Both DPAs and NPAs share a central feature: they enable prosecutors to impose criminal sanctions on a firm without subjecting it to formal conviction.

Prosecutors are better able to deter corporate misconduct when they are able to proceed against corporations using both DPAs and conviction. DPAs can be used to induce corporations to voluntarily report misconduct and provide the government information needed to convict the individuals responsible for the crime (Arlen and Kraakman 1997; Arlen and Kahan 2017). This deters by increasing individual

[*] Research Fellow, George Mason School of Law.

[**] Norma Z. Paige Professor of Law, New York University School of Law and Director, NYU Program on Corporate Compliance and Enforcement.

This paper was prepared for a conference Corporate Crime and Financial Misdealing, at the New York University School of Law. We would like to thank the following for their helpful comments and discussions: Danny Alter, George Canellos, Marcel Kahan, Jeffrey Knox, Geoffrey Miller, Daniel Richman,. We also would like to thank our excellent research assistants, Cristina Vasile and Jerry Goldsmith. Jennifer Arlen is grateful for the financial support of the D'Agostino/Greenberg Fund of New York University School of Law. Cindy Alexander thanks and benefitted from [George Mason Grant].

[1] See *New York Cent. and Hudson River R.R. Co. v. United States.*, 212 U.S. 481, 493 (1909).

[2] *United States v. Twentieth Century Fox Film Corp*., 882 F.2d 656, 660-61 (2d Cir. 1989); *United States v. Hilton Hotels Corp*., 467 F.2d 1000 (9th Cir. 1972),, *cert. denied* 409 U.S. 1125 (1973),.

[3] *E.g.*, *United States v. Basic Constr. Co*., 711 F.2d 570, 573 (4th Cir. 1983),; *United States v. Twentieth Century Fox Film Corp.*, 882 F.2d 656 (2d Cir. 1989),; *United States v. Potter*, 463 F.3d 9 (1st Cir. 2006),; United States v. Ionia Mgmt. S.A., 555 F.3d 303 (2d Cir. 2009); accord US Attorney's Manuel, Section 9-28.800 (The existence of a corporate compliance program, even one that specifically prohibited the very conduct in question, does not absolve the corporation from criminal liability under the doctrine of *respondeat superior*.

[4] Principles of Federal Prosecution of Business Organizations, United States Attorneys Manual (USAM), § 9-28.300.

wrongdoers' risk of being punished for their misconduct.

Some scholars have criticized the use of DPAs on the grounds that they lack the stigmatizing effect of a corporate conviction (Uhlmann 2013, at 1335; Garrett 2014; see Garrett 2007),[5] thus weakening the deterrent effect of a corporate criminal conviction.[6] This argument relies on the unexamined assumptions that DPAs impose lower reputational and collateral sanctions on the corporation than a conviction and that DPAs cannot be structured to trigger the same reputational sanction as a formal conviction (see Uhlmann, 2013, at 1336).[7]

This chapter analyzes whether corporations bear a larger reputational penalty when a criminal settlement is imposed through a conviction (guilty plea) than when it is imposed through a DPA. We focus on reputational consequences that are material to a firm's financial welfare in that they cause the firm to have lower profits or a reduced stock price as these have the potential to deter.[8] We find that the decision to sanction a firm through a guilty plea instead of a DPA should not affect the reputational cost to the firm of the criminal settlement for two reasons. First, some criminal resolutions do not impose reputational damage costs on the firm regardless of the form they take. Second, the magnitude of the reputational damage produced by criminal settlements that do impose reputation costs does not depend on whether the firm pleads guilty. Instead it depends on other considerations, such as the nature of the firm, nature of the crime, internal governance at the time of the crime, and post-crime actions by the firm, which are not influenced by the choice of settlement mechanism. Our conclusions hold for reputational damage imposed by hidden market actors and for those imposed by federal agencies through administrative sanctions such as debarment.

Corporations sanctioned for criminal misconduct incur a reputational sanction when public announcement of the criminal settlement leads other people who deal with the firm to view the firm in a less favorable light and take actions that negatively impact the firm (see Klein and Leffler; Alexander 1999; see Karpoff and Lott 1999). The reputational penalty thus does not depend on the impact of the conviction on the views of the world at large. Instead, it depends on reaction of those parties who contract with, or

---

5 According to Uhlmann, we "achieve less in terms of punishment and deterrence when we enter deferred prosecution and non-prosecution agreements." (2013, at 1336).

6 The losses in reputation capital and other market-based costs that corporations experience at news of crime qualify as sanctions for crime that have a deterrent effect to the extent that the corporation can avoid them by reducing the probability that a crime occurs. In this sense, the reputational sanction adds to the deterrence effect of the legal sanction.

7 This claim also assumes that a high reputational penalty enhances deterrence. In fact, the reputational penalty can undermine deterrence. Corporations may be less likely to actions that might bring existing misconduct to light if they expect to suffer a significant reputational penalty as a result. Corporate criminal enforcement policy can counter-act this disincentive by reducing the penalties imposed on firms that report and cooperate (Arlen 2012).

8 Throughout we focus on the reputational sanction imposed on large firms (firms characterized by a separation of ownership and day-to-day control) and thus compare the reputational cost of DPAs and guilty pleas (see Alexander and Cohen, 2015 finding that X% of convictions involving publicly held (large?) firms are done through guilty pleas).

are otherwise in a relationship with, the firm—hereinafter "interested outsiders." These interested outsiders include hidden customers, suppliers, creditors, and government agency payees.

Interested outsiders have incentives to alter their relationship with the firm when news that the firm was sanctioned for a crime provides a negative signal about the firm about the expected net benefit of dealing with the firm. In some cases, the facts of the crime may signal to interested parties that the firm's agents are not to be trusted. In others, interested parties may conclude the crime resulted from deficient governance which could also impair the value of their own relationship with the firm. In such situations, news of a criminal settlement will lead interested outsiders to reduce their willingness to pay for the firm's products or increase the amount they charge the firm (Klein and Leffler; see Karpoff and Lott), provided that they have sufficient market power to do so and the firm has not otherwise intervened to repair its reputation, for example by terminating responsible managers, investing in compliance or hiring a corporate monitor (Alexander 1999). In either event, the magnitude of the reputational sanction should depend on the degree to which the criminal sanction signals interested parties that the firm has an enhanced probability of harming others in the future or has poor internal governance. We claim that the nature of the crime, statement of facts concerning the crime and the firms response, and the sanctions imposed (including mandated reforms) all potentially contribute to the reputational sanction. The decision whether to convict or impose a DPA, in and of itself, does not.

We identify, evaluate, and reject three alternative hypotheses of how news that a firm was convicted might provide a stronger signal that the company has a relatively higher chance of repeating the offense than under DPA, holding constant the nature of the crime and the firm's governance.

Conviction could trigger higher reputational costs if information released by at the moment of conviction provides stronger direct evidence that the firm presents a greater risk to interested outsiders than the information produced by a DPA, holding constant the facts of the crime and the firm's governance (the *direct revelation* hypothesis). We find little support for the *direct revelation hypothesis* however because prosecutors can release the same information about the crime and the firm through both forms of resolution. In each situation, the case is resolved through a negotiated agreement (e.g. a guilty plea) and not a trial. Both agreements involve negotiated charges; require the firm to admit to a negotiated statement of facts detailing the wrong; provide negotiated facts about the effectiveness of the firm's compliance program, the firm's response to the crime, and its post-crime reforms; and detail the reforms the prosecutor has imposed to impose to deter future wrongdoing. The settlement documents produced by conviction thus do not provide any distinctive information indicating that the firm presents a greater risk of future wrongdoing.

Alternative, the decision to convict would higher reputational if a prosecutors' decision to convict provides a reliable signal to interested outsiders that the prosecutor has hidden information that the convicted company has a relatively high risk of future wrongdoing or has deficient governance (*prosecutor selection* hypothesis). Although prosecutors publicly disclose considerations that influenced their decision, we conclude that their decision also may depend on undisclosed information about the scope of detected misconduct, the quality of internal governance, managements' trustworthiness, the significance of potential collateral consequences, and the quality of post-crime reforms. Interested outsiders also may be able to use their knowledge of official enforcement policy and prosecutors' incentives to obtain a signal about the set of hidden facts that tend to determine whether prosecutors insist on a plea. Nevertheless, we conclude that the signal provided by conviction will not lead interested outsiders to impose higher reputational damage cost on the firm because the considerations most likely to impact the decision to convict do not correlate with the considerations that indicate the firm has an enhanced risk of committing future misconduct. Instead, interested outsiders seeking such a signal can be expected to focus on a different choice common to pleas and DPAs: whether the prosecutor concluded she should impose interventionist mandates designed to deter future misconduct.

Third, the decision to convict might trigger higher reputational costs if managers' choices of whether to accept a plea signals that they have hidden facts that are relevant to the future risk of misconduct (*managerial selection* hypothesis). To evaluate this, we first consider what hidden information could lead managers to accept a plea, assuming the plea does not alter any other public disclosures in the document, including charges filed and sanctions imposed (or threatened). In this situation, management might be willing to accept a plea if they have information that the collateral consequences, here and abroad, are far less costly to the firm than the costs triggered by continued delay in resolving the case. This would not affect reputational damage costs. Yet managerial selection could lead interested outsiders derive a negative signal from a plea if managers might agree to a plea in return for changes in the terms of the deal that benefit them. In this case, conviction could signal that the firm has a higher risk of future misconduct if three conditions are met: (1) managers are willing to agree to a corporate plea in return for hidden benefits, such as insulation from either individual liability or intrusive mandates, (2) individual liability and mandates promote deterrence, and (3) prosecutors place such a high value on a plea that they are willing to agree to this trade-off even though it reduces social welfare. We conclude such trade-offs should not be expected for several reasons. First, federal prosecutors are directed to pursue individual convictions and must report decisions concerning individuals to supervisors. Second, boards of publicly held firms have a majority of independent directors and increasingly delegate oversight of criminal matters to a committee of disinterested board members, particularly when senior management may be implicated. These outsiders breach their duties if they accept corporate conviction to provide benefits to management. Moreover, this theory for how plea enhance reputational damage costs does not attribute the enhancement to the plea itself but instead to the prosecutors' willingness to enter into inferior deals to get a plea. This channel does not argue for increasing prosecutors' incentive to use pleas.

Finally, whether or not conviction signaled facts about the firm at the time of the crime indicating it faced a heightened risk of future harm, interested outsiders should not impose enhanced reputational damage on all firms subject to a guilty plea. Prosecutors and firms use criminal settlements to publicly disclose or mandate a host of corporate reform including termination of wrongful employees, compliance program improvements, monitorships, enhanced external reporting, and other corporate governance reforms (e.g., Alexander and Cohen 2015; Arlen and Kahan 2017; see also Alexander 1999; Khanna and Dickerson 200; Garrett 2007). These mandates, which can be imposed through a guilty plea or a DPA (Alexander and Cohen 2015), generally are intended to reduce the risk of future wrongdoing by improving the firm's oversight of employees (compliance) and enhancing internal and external oversight of management's oversight of compliance (see Arlen and Kahan 2017). As a result, regardless of the considerations that led prosecutors to pursue a conviction, there is no intrinsic reason to expect a convicted firm to have a heightened risk of future misconduct if prosecutors make effective and appropriate use of the tools available to them, such as monitors. Indeed, to the extent that convicted firms adopt enhanced compliance programs and are subject to enhanced external oversight by monitors, prosecutors, or civil regulators, the firm might be less likely to commit a crime going forward. Of course, the hidden cost to the firm of rebuilding its reputation through such reforms is another form of reputational sanction. But these costs are triggered by the mandates imposed, and do not depend on whether the mandate was imposed through a guilty plea or a DPA. Thus, all else equal, there is no reason why conviction is needed in order to impose a reputational sanction through concerned outsider parties, nor any reason to expect that it does impose a larger outsider-based reputational sanction under current enforcement practice.

Our conclusion that conviction and DPAs can impose similar reputational sanctions holds even as to firms that regularly contract with federal agencies. Federal agencies implement reputational sanctions through policies mandating and permitting debarment and delicensing of firms sanctioned criminally or civilly for certain offenses. These collateral consequences are a form of reputational sanction when public agencies target debarment and delicensing at firms that present an enhanced risk of future wrongdoing.[9] Although convictions often trigger "mandatory" debarment and delicensing in fact government-imposed reputational costs need not be intrinsically higher for convictions than DPAs. First, under most federal regulations, federal agencies can exempt a firm from "mandatory" collateral sanctions based on its own evaluation of future risk or wrongdoing. In turn, an agency can debar or delicense even when a prosecutor employed a DPA by using civil or administrative proceedings to establish that the firm committed the level of misconduct needed to trigger collateral consequences

[9] Alternatively, the collateral penalty may simply be imposed by a federal agency as an on-going sanction that may be harder to avoid than financial penalties. This possibility also does not suggest conviction a superior deterrence because this form of sanction is not grounded in either the harm caused or the risk of future wrongdoing.

without a conviction.[10] Second, federal prosecutors can impose a conviction without triggering material “mandatory” sanctions by imposing the conviction on an affiliate within a broader organization that would not be harmed by collateral penalties imposed in the U.S.[11] Thus, there are few sanctions that serve U.S. interests that could not be achieved equally well through conviction or a DPA.

Thus, the reputational cost of a criminal settlement should not depend on whether the firm is convicted or subject to a DPA, holding constant the facts of the case. The potential for reputational sanctions does not provide a deterrence-based justification for a policy favoring conviction over DPAs.[12] Of course, federal enforcement policy could be reformed to target convictions at firms with enhanced risk of future misconduct, thereby providing a signal to interested outsiders. But there are other ways to provide this signal and such a policy would sacrifice other goals, such as inducing self-reporting and cooperation (Arlen 2012; Arlen and Kraakman 1997). A policy favoring conviction in most cases would be inconsistent this effort.

This chapter proceeds as follows. Section 2 discusses existing federal enforcement practice, focusing on the use and implications of conviction versus pretrial diversion. Section 3 provides an economic analysis of when and why public disclosure that the firm was sanctioned for a criminal wrong should produce an economically-material stigma—i.e., a reputational sanction. Section 4 shows conviction and DPA should produce identical reputational sanctions, all else equal, because there is no essential difference between them relevant to third party’s expectation of the risk of future wrongdoing. Section 5 examines collateral consequences and finds the conviction neither is necessary nor sufficient to enable federal authorities to impose either a reputational sanction or a punitive sanction when appropriate.

2. Federal Corporate Criminal Enforcement: Conviction vs Pretrial Diversion

In the United States, prosecutors can sanction firms through formal conviction (generally through a negotiated plea agreement) or through a deferred or non-prosecution agreement. DPAs are now the preferred method of prosecutors in the criminal division and U.S. Attorneys’ Offices for settling criminal cases against publicly held firms.[13]

---

[10] Nor does conviction necessarily reduce the cost to the government of imposing a reputational sanction. Given that conviction is not predicated on the same considerations that would govern debarment, the decision to convict can increase or decrease the agency’s cost: it reduces the cost to the agency of debarment when debarment is appropriate; yet it increases the cost to the agency by requiring it to intervene to avoid debarment when a collateral sanction is not appropriate.

[11] E.g., Pfizer; UBS Japan

[12] A central difference between the two lies instead in the enhanced uncertainty produced by conviction, arising from collateral penalties imposed on convicted firms by foreign governments. Yet the uncertainty and enhanced risk created by collateral sanctions beyond our knowledge and control would not appear to argue in favor of conviction.

[13] [add citation to A&C Am Crim L Rev talves. Federal prosecutors also can use DPAs to sanction non-publicly held firms, including closely held firms. Nevertheless, by and large, the vast majority of firms subject to DPAs are publicly held and the debate over the use of DPAs has focused on their application to publicly held firms.

Critics of DPAs argue that DPAs undermine deterrence by lowering the sanction for corporate crime. These critics claim that DPAs enable companies to avoid the costs of the reputational damage that they would suffer if they were required to plead guilty (e.g., Uhlmann 2013; Garrett).

This section the compares pleas and DPAs to assess the magnitude of the monetary sanctions and forms of sanction that can be imposed under each. It concludes that DPAs can have the same direct impact on a firm. The claim that DPAs differ from pleas depends entirely on whether they trigger different responses from third parties in the form of either reputational sanctions or collateral penalties.

2.1. Federal Corporate Criminal Enforcement Practice

Corporate criminal enforcement practice against publicly held firms has changed dramatically since the late 1990s. In the 1990s, almost all firms criminally sanctions for federal crime were formally convicted. Today, the Criminal Division and U.S. Attorneys' Offices generally proceed against publicly held firms using pretrial diversion agreements—specifically deferred or non-prosecution agreements (DPAs).

Under a DPA, the prosecutor files a criminal information but agrees not to seek conviction so long as the firm satisfies the terms of the agreement. Under an NPA, the prosecutor agrees not to charge the firm so long as it satisfies the terms of the agreement. Both DPAs and NPAs enable prosecutors to impose criminal sanctions without imposing a formal conviction. Prosecutors are encouraged to employ DPAs largely to either insulate firms from the ruinous collateral consequences of conviction or to reward firms for cooperation and self-reporting.[14]

Prosecutors have embraced DPAs since they were encouraged to do so by the 2003 Thompson Memo[15] (Alexander and Cohen 2015; Arlen and Kahan 2017). Yet this increased use of DPAs does not appear to have reduced the average number of publicly held firm convicted each year. In the years leading up to the Thompson Memo (1997-2002) federal prosecutors in the Criminal Division or U.S. Attorney's Offices convicted approximately *19* publicly held firms a year on average (see Table One). After 2003, federal prosecutors in the Criminal Division and U.S. Attorneys Offices convicted an average of *17* firms per year between 2003-06 and *29* firms per year between 2007-11. Now, as then, convicted corporations include many household names, including Pfizer, Credit Suisse, Siemens, and Merck.

[14] Principles of Federal Prosecution of Business Organizations, § 9-28.300 of the United States Attorneys Manual (USAM). DOJ policy also encourages prosecutors to take other considerations into account, including the effect of corporate conviction on innocent parties, and remedial measures taken by the firm, in deciding whether to defer prosecution. Almost (but not all) all firms granted a DPA or NPA either cooperated or self-reported.

[15] Larry D. Thompson, Deputy Attorney General, U.S. Dep't of Justice, to Heads of Department Components and United States Attorneys (Jan. 20, 2003) [hereinafter Thompson memo]. In the entire period prior to 2002, prosecutors negotiated only 18 DPAs. *See* Garrett (2007). By contrast, prosecutors entered into approximately 245 DPAs from 2003-14 (see Alexander and Cohen 2015, providing data on 2003-11 and Arlen and Kahan 2016, providing estimates for 2012-14).

Thus, DPAs did not reduce corporate convictions. Instead they appear to have led to an increase in the total number of criminal settlements with public companies and their controlled subsidiaries. Analysis of total agreements finds that prosecutors entered into 20 criminal settlements per year between 1997-2002, 27 per year during 2003-2006, and 51 per year during 2007-11.[16] This increase appears to be significantly attributable to DPAs. Examining criminal sanctions imposed by prosecutors under the Principles between 2007-2011 we find that 38% involved a guilty plea and 62% involve a DPA.

The rise in DPAs coincided with a significant rise in sanction for violations of the FCPA, anti-money laundering laws, and health care statutes. Many of these statutes provide a basis for sanctioning a parent company as well as a subsidiary, even when the subsidiary is the primary wrongdoer. Examining Table 2, 68% of the DPAs imposed between 2007-11 were imposed on parent corporations, compared with 39% of the pleas. It is not uncommon to find a corporate group with some firms in the group getting a DPA and others a conviction.

The rise in DPAs also has coincided with, and arguably is explained by, a concerted effort to increase deterrence by inducing corporations to self-report and cooperate (Arlen and Kahan 2017; see Arlen and Kraakman 1997). Prior to DOJ's embrace of various forms of leniency for firms that self-report, firms rarely disclosed wrongdoing that might remain undetected. Today, more firms are willing to self-report on the implicit understanding that they will not be convicted. Incentives to self-report are muted by recognition that firms often can avoid conviction simply by cooperating. Prosecutors investigating serious wrongdoing regularly use DPAs to induce firms to pursue and provide prosecutors with in-depth investigations as firms are better positioned to incur the enormous cost. Cooperation is particularly important in FCPA cases because corporations are better able than federal authorities to obtain evidence on employees' wrongdoing that took place overseas.

2.2. Sanctions Imposed Directly by Prosecutors: Pleas vs. DPAs

Critics of existing enforcement policy argue that DPAs necessarily undermine deterrence by lowering the sanction for corporate crime (e.g., Uhlmann 2013; Garrett). Prosecutors can directly affect the firm's welfare in three ways. First, they can detail and require the firm to admit to criminal misconduct. Second, they can impose criminal fines and other monetary sanctions. Finally, they can impose a variety of nonmonetary sanctions, including corporate compliance mandates and mandates requiring the firm to accept a monitor. This Part shows that the decision to convict the firm or employ a DPA does not affect the prosecutors' ability to impose these sanctions.

2.2.1 Admission of Wrongdoing

Corporate convictions and DPAs generally share important features: they are negotiated and involve either formal charges or an admission of wrongdoing. Corporate

[16] The number of corporate groups is slightly less than the number of settlements because some groups entered into more than one settlement for a given underlying offense (see Alexander and Cohen 2015).

convictions generally result from plea agreements. The firm pleads guilty through an agreement that include a statement of facts and set of charges negotiated with the prosecutor. Prosecutors entering into DPAs with firms also file charges and negotiate a statement of facts that require firms to admit that they engaged in criminal conduct.[17] With NPAs, formal charges are not filed but the agreements make clear the charges that would be brought if charges were filed. Prosecutors also can and do include a statement of facts where firms admit to misconduct that could serve as the basis for formal charges if the agreement is breached. Thus, all three types of settlements tend to include a statement of facts in which the firm admits wrongdoing that was negotiated by the firm and the prosecutors in the shadow of each party's threat to take the matter to trial.

2.2.1. Monetary Sanctions

Prosecutors negotiating guilty pleas can impose fines and other monetary sanctions (such as criminal restitution) on firms.[18] Prosecutors are encouraged to seek sanctions consistent with the Organizational Sentencing Guidelines but the Guidelines are discretionary. Prosecutors entering into DPAs and NPAs also can impose monetary sanctions delineated as "criminal fines," as well as other forms of monetary sanctions. In the case of DPAs, prosecutors also are encouraged to apply the Organizational Sentencing Guidelines. Thus, the use of a DPA does not reduce the prosecutors' authority to impose monetary sanctions.

Indeed, in theory prosecutors may be better able to impose unusually large sanctions through DPAs than through pleas.[19] When prosecutors enter into a guilty plea, the judge, not the prosecutor, has ultimate authority to determine the sentence. By contrast, prosecutors appear to have ultimate authority to set fines imposed through a DPA. NPAs are not filed in court. DPAs are filed in court but the prevailing authorities indicate that judicial authority is restricted to ensuring that the prosecutor has not violated the Speedy Trial Act. Judges appear not to have supervisory authority over the terms of DPAs, such as monetary sanctions. *U.S. v. Fokker Services, B.V.*, No. 15-3016, D.C. Circuit (April 5, 2016).[20] Thus, prosecutors in theory may have a greater ability to impose maximal punishments through DPAs than through pleas.

---

[17] A few DPAs do not require firms to admit to wrongdoing. Yet this is the exception. The important point for our purposes is that prosecutors can and usually do structure DPAs to ensure that the firm admits to the misconduct.

[18] See Arlen (2012) discussing why prosecutors should impose lower fines on large firms that self-report and cooperate than the Organizational Guidelines recommend because the Organizational Guidelines provide insufficient mitigation to large firm to induce self-reporting and effective cooperation.

[19] This Part focuses on the prosecutors' authority to impose large sanctions because the claim that DPAs necessarily lower sanctions depends in part on whether the decision to use a DPA constrains the monetary sanctions prosecutors can impose.

[20] District Court Judge John Gleason did conclude that judges have some supervisory authority over DPAs. Nevertheless, he found that their authority is not coextensive with their authority over guilty pleas. Instead, judicial authority to review the content of DPAs appears to be limited to rejecting egregious abuses that violate fundamental rights, such as due process, or the DOJ's own guidelines. United States v. HSBC Bank, 2013 BL 175499 (E.D.N.Y. July 1, 2013).

Examining actual penalties imposed, we see that prosecutors both have the authority to, and do, impose equivalently large monetary sanctions through DPAs and convictions, when circumstances warrant. Indeed, the mean penalties imposed through criminal agreements are higher for DPAs than for pleas in 2003-06 and 2007-11. For example, in 2003-06 the mean penalty imposed through a plea was $8 million whereas the median imposed through a DPA was $45 million. In considering this data is it important to bear in mind that the type of firms and crimes subject to DPAs and pleas differ. Moreover, many DPAs are imposed on corporate groups in which a member of the group also may be subject to a plea. Nevertheless, the central point remains: a prosecutor who decides to impose a DPA instead of a plea does not reduce his ability to use monetary sanctions to deter future misconduct.

2.2.3. Nonmonetary Sanctions: Corporate Mandates

Criminal settlements also can impose significant non-monetary sanctions on publicly held firms.

Plea agreements impose nonmonetary penalties through corporate probation orders. Corporate probation orders can be used to impose non-monetary sanctions. These include adoption of a prosecutor-approved (and often prosecutor-designed) compliance program, other corporate governance reforms, the obligation to accept and pay for a corporate monitor, and/or adverse publicity. In addition, pleas may require firm to accept and pay for a prosecutor selected monitor. Agreements also may require the firm to comply with agreements entered into with regulators subjecting the firm to enhanced oversight and internal reforms (Corporate Integrity Agreements).

Prosecutors entering into DPAs also can impose mandates on firms to impose significant nonmonetary sanctions on firms. Indeed, the majority of DPAs require firms to adopt a corporate compliance program, often with specified features imposed by the prosecutors. Some compliance mandates simply require firms to adopt a compliance program that satisfy the requirements for an effective compliance program set forth in the Organizational Sentencing Guidelines.[21] Yet in other cases, the agreement requires the firm to adopt a detailed, prosecutor imposed, compliance program, imposing millions or hundreds of millions in additional cost (Arlen and Kahan 2017).

As with pleas, DPAs also can impose other corporate governance reforms, including requiring firms to alter their internal reporting structure, add specific people to the board of directors, or alter the committee structure of the board or management, modify certain business practices, or hire a prosecutor-approved corporate monitor. A handful of agreements also limit the scope of the firms' business, for example by providing that the firm may not pursue certain lines of business. In addition, some agreements detail that the firm terminated managers responsible for the wrong either prior to or as part of the agreement (see generally Alexander and Cohen 2015; Arlen and

[21] U.S. Sentencing Guidelines Governing Organizations, Chapter 8 [hereinafter Organizational Sentencing Guidelines].

Kahan 2017).

2.3. Effect of Pleas and DPAs on Sanctions Imposed by Others

Accordingly, firms sanctioned for corporate crime can be subject to the same panoply and magnitude of formal federal criminal sanctions whether they are sanctioned through a DPA or are formally indicted and convicted.

Yet corporations also sustain informal costs of conviction that extend beyond the formal sanctions and contribute to the general deterrence of corporate crime. These informal costs include costs of stigma, reputation loss, and collateral sanctions. They are triggered by the revelation of the crime and conviction, yet imposed by third parties through a process that is beyond the prosecutor's direct control and not directly administered through the law.

Criminal settlements can trigger third parties to impose either or both of two types of sanctions on the firm. First, the settlement may produce a reputational penalty. This reputational penalty may manifest itself in third parties' reduced willingness to deal with the firm on favorable terms, as discussed below. Or it may require the firm to make additional expenditure in compliance and other reputational-building undertakings in order to place itself on a level playing field with other firms. The financial cost of the reputational penalty could potentially operate just like any other sanction to punish and deter crime. Second, the settlement may cause federal, state and foreign regulators to impose collateral penalties on the firm. These penalties include loss of licenses and orders precluding the firm from contracting with certain agencies, such as Health and Human Services or the Defense Department, for some period of time (Cohen 1996, p. 409). Collateral consequences also provide a financial incentive to deter crime to avoid the loss of revenues triggered by these sanctions.

Critics claim that DPAs nevertheless have a weaker deterrent effect because they believe that the choice to employ a DPA instead of a plea affects the sanctions imposed on the firm by third parties (e.g., Uhlmann 2013; Garrett). This presents the questions whether the decision to employ a DPA instead of a conviction necessarily reduces reputational or collateral penalties and, if so, does this suffice to justify a presumption favoring formal conviction?

3. Cost of Reputational Damage at Settlement

To evaluate the claim that DPAs impose a lower cost of reputational damage on the offending firm than formal conviction through a guilty plea, we must first determine when, and why, the public announcement that a firm has accepted legal responsibility for a crime through any form of criminal settlement can cause the firm to sustain costs attributable to reputational damage. In this section, we identify the factors that determine whether, and the extent to which, a corporation suffers costly reputational damage around the announcement of a criminal settlement.[22] We first identify the characteristics of the offense that may cause the offender's clients and other counter-parties to be less willing to deal with it in the future. We then identify additional information about the sanctioned firm's relation to the offense that can influence outsider views and thereby aggravate or mitigate the reputational damage to the firm and its cost. These factors and considerations are the starting point for our inquiry into the differences between DPA and pleas in the next section.

3.1 Introduction

The "reputational damage cost" of a criminal settlement is the anticipated cost to the firm resulting from the anticipated negative reactions of those who might otherwise deal with the firm in the future to the news that the firm has accepted legal responsibility for committing a crime. The reputational damage cost can arise from many sources, including lost profits from reduced sales or higher prices for supplies, along with costs of restoring outsider confidence in the ability of the firm to meet expectations. Thus, unlike the formal legal sanction, the cost of reputational damage is not directly imposed by the prosecutor. It is imposed by the "market" or, more specifically, by outsiders who are in a position to impose costs on convicted corporations despite the lack of any express legal authority to do so.[23] We refer to these outsiders as "interested outsiders." These interested outsiders may include hidden customers, suppliers, and government agency payees.

Whether the firm incurs these costs depends on whether the public announcement of the settlement leads interested outsiders to view the firm less favorably and be less willing to deal with the firm in the future. Several basic factors must be present for the settlement information to cause outsiders to react in a way that imposes costly reputational damage on the firm. First, the settlement information must lead outsiders to update their views about the chance of a future offense. It must signal an increase in their risk of harm from future misconduct by the firm.

Second, the increase in perceived crime risk must lead to a reduction in outsiders' willingness to deal with the firm in the future. The outsider must be able and willing to avoid anticipated harm by avoiding dealing with the firm, such as by diverting transaction

[22] To highlight the informational differences between Plea and DPA, we attribute the release of all information contained in the settlement agreement to the agreement, independently of whether it was known publicly pre-settlement. In doing so, we abstract away from any differences in impact that might arise between differences in the timing of information release between the two forms of settlement.

[23] A central insight of the economics literature on reputation is that outsiders can impose a cost on the firm when they deal directly with the firm, for example as customers, suppliers, or employees (see Tirole (), citing Klein and Leffler 1981 and Shapiro 1983). Both Klein-Leffler and Shapiro analyzed "reputation" defined in terms of consumer expectations about product quality. Firms bear a "reputational penalty" when these expectations are not met and future consumers respond by reducing their willingness to pay for the product. The corporation's market-based incentive to maintain quality at a high level derives from: (i) the reputable firm's ability to earn a positive price-cost margin ("quality-assuring premium"); and (ii) the hidden incentives of third parties to cease dealing with the firm if an event, such as news of crime, reveals an inability to maintain high quality.

volume to one of the firm's competitors. To be sure, the firm might offer concessions to avoid the loss in volume. The reduction in outsider willingness to deal with the firm in response to the settlement may thus lead to costs of reduced volume and concessions from the firm to compensate for the increased risk of harm (e.g. a better price or evidence of commitment to reforms that eliminate the risk).

Third, the outsider's reaction must be costly to the firm. That is, the anticipated loss in outsider volume and any associated concessions that the firm might offer to avert such loss must not be costless from the firm's perspective.

The first two conditions, concerning the outsider reaction, are the focus of sections 3.2 and 3.3. As shown in Section 3.2, the interested outsider's incentive and ability to react depend on the nature of the crime and the extent of the outsider's reliance on the offending firm. As discussed in Section 3.3, regarding aggravating and mitigating factors, characteristics of the offender at the time of the offense, as well as reforms between the offense and settlement, can influence the outsider response and, thus, cost of reputational damage. Implications for crimes involving government as injured party, in its role as client or customer of the offending firm, are discussed in Section 3.4. A brief conclusion appears in section 3.5,

3.2 Outsider Reaction to News of Settlement

We begin with a discussion of the outsider reaction to news that the firm entered into a criminal settlement in which it accepted legal responsibility for committing the crime. In evaluating news of the settlement, interested outsiders will have access to the government's press release announcing the criminal resolution, the content of the criminal settlement itself, and press coverage of the criminal settlement.

Interested outsiders can impose costs on the firm because they confer value on the firm but have no legal obligation to deal with it. It is the voluntary nature of the relationship – the freedom to deal or not to deal with the corporation – that empowers interested outsiders to react to crime news in ways that can be costly for the firm (e.g., Karpoff and Lott 1984; Alexander 1999; see also Karpoff, Lee and Martin 2008; Murphy Shrieves and Tibbs 2009).

Interested outsiders voluntarily divert transactions away from a firm convicted of wrongdoing when it is in their self-interest to do so.[24] News that the firm was convicted of a crime that harmed some outsiders may cause other, similarly situated outsiders not to want to deal with the firm in the future if they conclude that this firm is more willing or

[24] Thus, interested outsiders alter their dealings with the firm when the news of the conviction reduces their expectations about the net benefits of their relationship with the firm. Some people may have social-regarding preferences that causes them to eschew all dealings with all convicted corporations in the belief the firm has violated the social compact, even when they otherwise would obtain a material benefit from dealing with the firm. Yet most people tend to focus on their own interests, and will tend to make decisions based on the expected value of the relationship to themselves.

likely to harm its counter-parties than previously expected.

The canonical case is conviction for actions that injure a corporation's clients or customers.[25] The rational (self-interested) reaction of potential future customers to news of such a conviction would be to take their business elsewhere, depending on their access to outsider sources and thus ability to do so.

To illustrate, consider three different types of crimes:

Fraud. A firm convicted of defrauding a subset of customers should expect significant reputational damage as fraud implicates all three factors discussed above. First, potential customers contemplating future dealings with the firm will view news that the firm defrauded prior customers as a signal that they face a greater risk of being defrauded by this firm than previously believed. Second, those customers may rationally respond by taking that business elsewhere or accepting concessions from the firm to compensate for the higher risk of harm. Finally, the corporation may anticipate bearing costs of this outsider reaction and, thus, a cost of reputational damage at settlement.

Environmental crime. In contrast, environmental crimes that cause harm to outsiders located near a company's operations may implicate the first factor but not the second. Outsiders may update their views of the chance of harm from a future offense. Yet harm does not arise from any voluntary dealings between the firm and the injured outsiders. Interested outsiders cannot expect to limit their risk of future harm by not dealing with the firm, accordingly. No outsider concludes from the settlement information that he is more likely to be harmed from dealing with the firm than from not doing so. Therefore, the offending corporation does not face a cost of reputational damage from this type of offense (Lott 1996; Alexander 1999).[26]

Antitrust (price-fixing and bid-rigging). A further illustration is the case of antitrust violations. The news of conviction for price-fixing may signal increased risk of future harm from dealing with the offending firm. Yet the customer's ability to avoid harm by avoiding future dealings with the firm may be limited to the extent all firms in the industry – all suppliers of a good or service – are involved in the offense. The second factor is not fully implicated.

In the case of price-fixing, an outsider's incentive and ability to avoid future harm

[25] See Alexander (1999) on the relation between offense type and outsider reaction to offense news.

[26] An environmental conviction could produce a reputational penalty if evidence that the firm knowingly discharged waste or falsified evidence of environmental wrongdoing adversely affects customers' perceptions about the quality of the firm's products (Cohen 1992). In addition, the firm may bear a reputational penalty when the circumstances of the crime indicates that the firm is likely to be a serial violator subject to substantial penalties for future wrongs that could weaken its financial health. In this situation, interest outsider providing financing to the firm might be unwilling to do so on favorable terms.

In addition, some infamous environmental crimes could produce a cost of reputational damage to the extent that customers conclude that the firm's conduct was reprehensible and thus the firm no longer deserves their business. It appears that the majority of customers do not respond in this area. Moreover, this effect appears to dissipate over time, as discussed below.

by diverting volume to a different supplier may be quite limited. The customer might not have good substitute sources of supply and thus prefer to stick with the convicted supplier rather than incur costs of switching to another product or withdrawing from the market altogether. For this reason, the cost of reputational damage to the offending firm is not properly seen as a part of the sanction for price-fixing. This underscores the importance of a fact-based inquiry into whether the second factor is present, focusing on the ability to avoid harm by avoiding dealing with the offending firm. For offenses that implicate all firms in an industry, the cost of reputational damage to is likely to be lower than if the offense involves only that one offender.

In summary, the information about an offense that is available to the interested outsider at settlement can lead interested outsiders to take actions that impose costs on the firm (hereinafter reputational damage costs) if two factors are present. First, the information reveals an increased risk of harm to the outsider from future dealings with the offender. Second, the interested outsider can reduce or avoid this risk by not dealing with the corporation or by dealing with it altered terms that impose additional costs on the firm.

Interested outsider's reaction to news of crime of course will depend on the sophistication of the outsider. It also will depend on the size, complexity or transparency of the offending firm. A sophisticated interested outsider learning that a firm committed a crime might recognize that news of a crime in and of itself does not suffice to indicate whether the organization itself it more likely to commit a crime. In the U.S. corporations can be held criminally liable for crimes by any employee, including non-managerial employees who violate orders (Arlen 2012). Thus, sophisticated interested outsiders can be expected to examine factors about the crime and the organization that indicate whether the corporate crime signals information was simply a random event, caused by a bad apple who somehow circumvented an effective compliance program, or alternatively occurred for reasons indicating broader problems within the firm. Such an outsider might consider a variety of factors about the crime itself, such as how wide-spread was the misconduct, how many separate offices were involved. He also might consider the location of the misconduct within the firm and what it reveals to the outsider about his or her chances of being harmed by a repeat offense, such as whether the prosecutor attributed the bad act to a local office, division or corporate office. Such an outsider might, for example, react differently to news that the firm's office in Nigeria was convicted of bribing foreign officials if he does not expect to deal with the firm's Nigerian operations and is confident that the origin of the crime is limited to those operations.

3.3. Aggravating and Mitigating Factors

The outsiders evaluating the chance that this firm may harm them in the future will not rely only on the facts of the offense itself. They also will evaluate information disclosed at the time of settlement about the organizational itself, including the quality of its efforts to deter misconduct, to determine whether the risk of future harm from this firm is higher or lower than average for others engaged in this activity. We refer to firm characteristics that suggest a higher chance of a recurrence as *aggravating* and those that would suggest a lower chance of recurrence as *mitigating.*[27] Criminal settlement documents (both pleas and DPA) typically highlight facts regarding the offender and not just the offense. This information regarding aggravating and mitigation factors, which is typically disclosed to explain the form of criminal resolution and the sanction imposed, also should influence the reputational damage costs imposed on the firm. In this section, we consider the different sorts of information that we have seen included in settlement documents and discuss implications for the interested outsider's reaction to the settlement.

3.3.1. Offender characteristics at the crime date

The internal conditions that give rise crime vary widely across corporations. At one extreme, information released at settlement may reveal conditions that suggest the crime was a random event that occurred despite best or widely accepted compliance practices in the firm. For example, the offense may have been easy to detect and involve only a single employee. Offense-date-specific information may suggest that no employee in the future will have an opportunity to commit a similar offense. Indeed, corporate crimes in the United States are sometimes said to originate from the actions of "a single rogue employee." This characterization is unsurprising given that, under United States law, a corporation can be convicted of a crime without any evidence of broader organizational culpability or deficiency. Specifically, a corporation can be convicted whenever an employee, in the scope of employment, committed a criminal act, with some ostensible intent to benefit the firm (Arlen 2012).[28] The firm can be sanctioned even though management was not involved, management instructed employees not to commit the crime,[29] the firm had an effective compliance program,[30] and the firm promptly

[27] We use the terms aggravating and mitigating factors to refer to considerations that can differ from those deemed aggravating and mitigating factors by the U.S. Sentencing Guidelines Governing Organizations.

[28] See *New York Cent. and Hudson River R.R. Co. v. United States.*, 212 U.S. 481, 493 (1909). The benefit requirement places few limitations on the scope of corporate liability. Its main effect is to insulate the firm from criminal liability for crimes pursued for purely hidden benefit, such as crimes against the firm itself (such as accepting bribes in return for taking action on behalf of the firm) or crimes such as insider trading done for purely personal profit.

[29] *United States v. Twentieth Century Fox Film Corp*., 882 F.2d 656, 660-61 (2d Cir. 1989); *United States v. Hilton Hotels Corp*., 467 F.2d 1000 (9th Cir. 1972),, *cert. denied* 409 U.S. 1125 (1973),.

[30] *E.g.*, *United States v. Basic Constr. Co*., 711 F.2d 570, 573 (4th Cir. 1983); *United States v. Twentieth Century Fox Film Corp.*, 882 F.2d 656 (2d Cir. 1989),; *United States v. Potter*, 463 F.3d 9 (1st Cir. 2006),; United States v. Ionia Mgmt. S.A., 555 F.3d 303 (2d Cir. 2009); accord US Attorney's Manuel, Section 9-28.800 (The existence of a corporate compliance program, even one that specifically prohibited the very conduct in question, does not absolve the corporation from criminal liability under the doctrine of

detected the misconduct and removed the wrongdoer. Thus, the cost of corporate crime can be seen as a cost of the inability of the firm's management and owners to exercise complete control over its employees. As such, the costs relating to the occurrence and avoidance of corporate crime as an "agency cost" of the firm (Arlen 1994; Alexander and Cohen 1999),

Interested outsiders regularly learn from the news released at settlement about both the firm's commitment to avoiding misconduct and the apparent effectiveness of its efforts to deter crimes, especially those produced by agency costs. Outsiders who obtain a signal that an organization has high crime-related agency costs may update their beliefs about the chance of a repeat offense upward, accordingly. Alternatively, as noted about, outsiders may conclude that the firm's internal controls are so effective that this crime is mostly likely an isolated random event.

The information that firms and prosecutors release at settlement about the firm's culture and internal governance may help outsiders distinguish between these extremes, enabling them to adjust their reactions accordingly. An emerging literature on corporate culture and an extensive literature on causes of corporate crime highlights some of the internal incentives provided to managers and employees to tone set from the top as a determinant of firm conduct (Arlen and Kraakman 1997; Alexander and Cohen 2011; Langevoort 2016). This tone reflects the culture of the corporation (Tyler; Simpson) and the related incentives of managers and other employees. This includes whether the firm had an incentive structure, such as through instituted compensation and promotion policies that create pressure to violate (or comply with) with the law (Arlen and Kraakman 1997, Alexander and Cohen 1999), and compliance programs, such as through ethics training, to dissuade and deter violations (e.g., Arlen 1994; Arlen and Kraakman 1997; Alexander 1999). Other more general governance measures also purport to improve lawfulness, for example by providing additional oversight over management. Additionally, firms can deter crime through a credible policy favoring in-depth investigation, self-reporting, and cooperation that provides evidence about the individuals responsible for the crime can deter misconduct by increasing employees' expected cost of crime (Arlen and Kraakman 1997). Internal governance that promote such "policing" activities thus also reduce agency costs.

Thus, a sophisticated outsider may predicate its assessment of the future risk of misconduct on variety of factors about the offender and the offense that indicate the effectiveness of the firm's internal controls. These may include the nature of the crime; whether the crime was committed by individuals who remain at the firm; committed or condoned by senior managers, involved many employees and many divisions across the firm, persisted undetected over a long period of time, and was rewarded by the firm's

---

respondeat superior).

compensation or promotion policies.[31] In addition, outsiders may treat as red flags evidence that the firm had a deficient compliance program at the time of the offense; failed to detect misconduct (especially if wide-spread) or detected it but failed to address initial red flags brought to managers' attention; conducted an inadequate or obstructive investigation, that, for example, resulted in the prosecutor requiring the firm to have a monitor; or evidence that senior management generally willing to accept a risk of harm to interested outsiders. We refer to these as *aggravating factors*. By contrast, the interested outsider may learn of offender characteristics that suggest a low chance of harm from a repeat offense. Examples include: evidence that the firm had an effective compliance program; the crime involved only one, relatively low level employee; or that the firm promptly detected and put a halt to the crime, thereby limiting the harm to others. Some of this is reported in settlement agreements. We refer to these characteristics of the firm relative to the offense as *mitigating factors*.

Criminal settlements disclose information about aggravating and mitigating factors at the time of the crime. Yet this may not be the most accurate information about the quality of the firm's internal controls at the time of the criminal settlement. Criminal investigations and corporate criminal settlement negotiations can take many years to conclude. During this time, the firm's risk of future misconduct can change.

3.3.2 Offender Reforms between Crime and Settlement

Firms can take a variety of actions, post-crime, to deter future misconduct and remediate any reputational damage. These actions include voluntary reforms that credibly alter the chance of a future offense. Such reforms may arise from the offending firm's investigation of the misconduct and its causes. In some situations, such as where there is a perception that the firm's failed to establish a culture of compliance, the firm may announce plans to fundamentally alter the culture of a firm by changing the leadership at the top—or at the top of the business unit that was charged or implicated in the crime. Firms regularly voluntarily adopt compliance program reforms. In some cases, compensation and promotion systems are revised. In others, the firm may end up replacing senior managers, either directly or by merging into another firm with different management. Information about these reforms regularly are announced at the time of settlement and can alter outsiders' views of the risk of a repeat offense, accordingly. They are mitigating factors from the outsider's point of view.

---

[31] Corporate crimes often are committed by managers seeking to increase compensation or hold onto their jobs in dynamic market settings. Corporate misconduct thus often is an agency cost (Arlen and Carney 1992; Arlen 1994; Arlen and Kraakman 1997; Alexander and Cohen 1999; Burns and Kedia 2006; Efendi, Srivastava, and Swanson 2007; and Bergstresser and Philippon 2006). News of a conviction can signal that the firm's compensation system provides excessive incentives to pursue risky strategies that provide short term benefits, including intentional crime (Arlen and Kraakman 1997; see Alexander and Cohen 1996), and its internal governance and compliance are not sufficiently effective to deter wrongdoing (see Beasley 1996; Agrawal and Chadha 2005).

In addition, many, if not most criminal settlements include prosecutor-mandated changes to the firm's compliance program. Many agreements also impose mandates to provide enhanced oversight over the firm's efforts to comply with the law by either the board or specialized management committees. Indeed, the settlement agreement may compel the firm to incur the costs of appointing and maintaining an external monitor or facing scrutiny from a regulator beyond what would occur otherwise (Garrett 2007; Arlen 2012; Alexander and Cohen 2015; Arlen and Kahan 2017). Elsewhere we refer to mandates that enhance oversight of management's efforts to deter misconduct as "internal governance reforms" and "meta-policing mandates" (Alexander and Cohen 2015; Arlen and Kahan 2017).

Criminal settlement documents tend to explicitly discuss both the firm's voluntary post-crime reforms and any reforms that are expressly mandated by the prosecutor. (see Alexander 1999, Alexander and Cohen 2016 for examples). Announced reforms will have two countervailing effects on reputational damage cost.[32] To the extent that the reforms are costly to the firm and assuage outsider concerns about future harms, the cost of the reforms are properly viewed as a cost of the reputational damage from the offense (see Alexander 1999). Yet the reforms may be able to reduce the reputational damage by eliminating the incentive of outsiders to divert volume from the firm – depending whether interested outsiders expect the reforms to be effective. (See Alexander 1999 and Laufer on the question of whether reforms announced at settlement reflect credible commitments by the firm to avoid a future occurrence of similar misconduct.)

In summary, as long as firms and prosecutors can impose effective reforms, they can use these reforms to fundamentally adjust the cost to the firm of any reputational damage it might sustain under either conviction or a DPA.

3.4. Government Agencies as Victims: Undertakings and Debarment

Costs of reputational damage arising from the reactions of government agencies to news of a crime warrant separate consideration given that criminal enforcement has historically tended to target criminal actions involving agencies of government as purchasers[33] (see Alexander 1999; Alexander and Cohen 2015). Government agencies employ a formal process when deciding how to respond to news of a criminal resolution. They tend to adopt ex ante rules governing the decision not to deal with a particular firm. For example, agencies such as the Department of Defense and Health and Human Services have formal policies governing when the agency will no longer deal with a firm

[32] In addition, the prosecutors' decision to impose reforms may provide a signal that the prosecutor concluded the firm had a heightened risk of misconduct. To the extent the reforms are effective, this negative impact of this signal may be offset by the mitigating effect of the reforms.

[33] Interested outsiders can include government agencies in addition to hidden parties. Government agencies may be directly affected, to the extent that they obtain goods or services from the firm (for example, health care products and defense). Government agencies may have an indirect stake to the extent they are tasked with protecting consumers in a particular market (for example, public securities markets) from fraud.

sanctioned for misconduct.

These policies are important to the assessment of reputational damage cost because debarment can be seen as a cost of reputational damage from the offense. Administrative agencies, such as Health and Human Services (HHS), have adopted rules stating that entities with a felony conviction for certain offenses (usually fraud and fraud-related offenses against either the agency or the customers they protect) are subject to "mandatory exclusion" from dealing with the agency or on the markets the agency regulates. Agencies also often have authority through "permission exclusion" rule to exclude individuals for other offenses, including misdemeanor convictions for fraud related offenses or government civil enforcement actions.

Were exclusion truly mandatory, regardless of the future risk of wrongdoing, then it would be more fairly characterized as a sanction than as a form of reputational damage. But as with the costs of reputational damage imposed by market participants, government imposed collateral sanctions often are not automatic.

Even mandatory exclusion provisions include waivers, which serve two objectives. First, a conviction does not always create a negative signal that warrants exclusion. Second, circumstances exist where the costs of exclusion may exceed the benefits from the government's perspective. For example, the government may not want to exclude a pharmaceutical company or defense contractor that is the only provider of an important drug, medical device, or military product. In these situations, the government agency may reasonably prefer to take actions designed to reduce the risk of future wrongdoing instead of excluding the firm. These actions can include mandated reforms—such a corporate integrity agreements and monitors—of the type imposed by prosecutors.

Thus, federal agencies tend to structure their rules to impose collateral sanctions such as exclusion or delicensing when the firm is convicted (or civilly sanctioned) for an offense that provides a negative signal about the benefits or costs of dealing with that firm in the future in matters within the agency's jurisdiction, such that debarment or delicensing is a superior response to mandated or voluntary post-crime reforms. Thus, the same basic considerations that result in the firm incurring costs of reputational damage through reactions of hidden parties to the offense should determine whether government agencies are motivated by reputational concerns to impose collateral sanctions on convicted publicly held firms convicted firm.

The central difference between hidden and public are three-fold. First the steps the agency must take to effectuate its preferences, which depend on factors such as the agency's discretion to waive exclusion and whether there is robust coordination between criminal and civil authorities, as discussed in Section 5. Second, federal agencies may be better able than individual hidden parties to seek alternatives to exclusion in the form of mandated reforms.

Finally, the actions of federal agencies may have greater spillover affects to the extent that agencies' responses are announced in the settlement document. When the injured party is an agency of the federal government acting on behalf of U.S. citizens, the settlement documents may include not just evidence of effort to prevent a future bad act but also evidence on the reactions of affected government agencies to news of the crime and the firm's post-crime actions. The settlement documents may contain information that a firm will or will not be debarred, as well as information on any reforms mandated by the agency. These provisions may not only directly reveal some of the costs of reputational damage to the firm from lost future business dealings, but also may impact other interested outsiders' assessment of the expected risk of dealing with the firm.

3.5 Conclusion

As we have seen, criminal settlements can, but do not always, impose reputational damage on firms. First, any argument favoring criminal conviction over DPAs that is predicated on the existence of reputational damage must be limited to the type of crimes that can plausibly trigger costs of reputational damage. Thus, in the next section, we focus on crimes that create a signal of an increased risk of harm to interested outsiders who may react by diverting their business dealings elsewhere. Crimes such as procurement fraud, health care fraud, and other crimes involving deceit of outsiders engaged in voluntary dealings with the firm are among the most plausible candidates. Environmental crimes are not.

Second, claims of greater reputational damage under DPA than plea face the burden of demonstrating a difference in information released at settlement under the two regimes and its materiality to the interested outsider. Without such a difference, the outsider reaction and consequent cost of reputational damage to a given firm for a given offense is the same.

4. Reputational Effect of Conviction versus DPAs

Section 3 identified the factors that determine the extent to which a firm will incur reputational damage costs as a result of entering into a criminal settlement. In this Section, we determine whether the magnitude of the reputational damage cost resulting from a settlement is affected by whether the prosecutor resolved the case through a DPA instead of a formal conviction. We focus on the choice between DPA and conviction through a plea, as this is the relevant choice for US prosecutors. We conclude that the choice of settlement form should not affect the reputational damage cost produced by announcement of the criminal settlement, holding all else constant including the facts of the crime, monetary sanctions and mandates.

Reputational damage depends on both the impact of the criminal settlement on interested outsiders' perceived risk of being harmed by the firm in the future and the cost to the firm and interested outsiders of reducing this risk (for example, by interested outsiders reducing their dealings with the firm). Criminal settlement agreements contain detailed facts about the crime, aggravating and mitigating factors, voluntary reforms, and mandates imposed by the settlement, as discussed below (infra Section 41.). Each of these facts can directly impact the cost to the firm of the reputational damage triggered by the criminal resolution—whether these facts are included in a plea or a DPA. Accordingly, to ascertain whether the decision to resolve a case through a guilty plea instead of a DPA alters the firm's cost of reputational damage, we must evaluate whether the decision to use a plea alters the information provided to interested outsiders about the firm's risk of harm, holding constant the statements made in in the settlement document about the crime, aggravating and mitigating factors, the firm's post-crime actions, voluntary reforms, and the sanctions and mandates imposed.

Pleas produce higher reputational damage costs than DPAs only if interested outsiders perceive that a firm is more likely to harm them if subject to a plea than a DPA, all else equal. Thus, the claim that pleas produce greater reputational damage costs depends on whether interested outsiders learn something different (worse) about the factors that affect their expected risk of harm—the nature of the crime, the aggravating and mitigating factors (see Section 3), and the nature and quality of post-crime reforms—if the firm is subject to a plea than if it is subject to a DPA.

We identify, but then reject, three potential channels through which the choice of settlement form might affect interested outsiders' expectations about the risk of harm from a firm sanctioned for criminal misconduct.[34] First, we consider whether pleas provide a stronger signal that the firm was a bad actor than a DPA, through differences in the type, reliability or salience of the information that is publicly-released at the time of settlement (*direct revelation channel).* Next, we consider whether imposition of a guilty plea instead of a DPA provides a signal to interested outsiders that the prosecutor had hidden information about a factor that correlated with the firm having a higher risk of misconduct in the future—information that is not otherwise fully revealed by the facts in settlement document and the choice of mandates (*prosecutor selection* hypothesis). Finally, we consider whether a plea provides a negative signal about senior managers that correlates with the firm having a greater risk of future misconduct (*managerial selection* hypothesis).

To assess these channels, we first evaluate them assuming that the firm's internal governance remains unchanged between the date of the crime and the settlement.[35] We first consider the impact of the decision to enter into a plea on the interested outsiders expectations of future risk given public disclosure in the criminal settlement document regarding the offender at the offense date. We conclude that none of these channels leads

[34] Notice only one of these three channels, direct revelation, if validates potentially supports a recommendation that prosecutors impose guilty pleas in almost all cases if validated (see Uhlmann 2013). The latter two channels only work if cases are resolved through both DPAs and pleas, with the latter being reserved for firms with the greatest risk of future misconduct.

[35] To be sure, the sequence of information events can affect the value of each to the outsider in forming beliefs about the chance of a repeat offense. Indeed, studies of the stock price impact of news about corporate criminal settlements have typically relied on news dates prior to the final settlement announcement to evaluate the implications of the settlement for shareholder wealth (see, for example, Alexander 1999, Alexander and Cohen 1999).

to a reputation damage cost differential. After considering each hypothesis based on historic facts, we then consider the impact of post-crime reforms on the claim that the cost from reputational damage is higher for guilty plea and DPAs. Both DPAs and pleas can, and regularly do, impose corporate reforms designed to reduce the risk of future misconduct.[36] We thus evaluate whether the information conveyed through any of these channels can signal future risk when this risk also may well induce mandates that induce changes to the internal governance and external oversight of the firm designed to address this risk (see Alexander 1999; Arlen and Kahan 2017).

Before considering these three channels it is important to note that a variety of cases can be excluded from consideration right from the outset. For example, we would not expect the choice of settlement form to matter if the firm is convicted of the type of crime that provides no signal to interested outsiders that the firm is willing to harm its counter-parties. For example, many environmental crimes that only harm third parties and regulatory violations the do not harm counter parties are unlikely to produce material reputational damage costs regardless of the settlement form. We exclude such cases from the discussion below.

4.1. Direct Revelation: Impact of the New Facts Released at Settlement?

Guilty pleas could cause a firm to suffer greater reputational damage costs for any given offense if the information directly released when a plea is announced—by prosecutors, the firm or the news media—provides a stronger signal to interested outsiders about the risk of being harmed by the firm than with a DPA. This could be the case if, but only if, the content, reliability, or salience of the information released to interested outsiders about a firm subject to a plea differs from that produced by a DPA and those differences systematically signal that interested outsiders are at greater risk of being harmed by their dealings with the firm. Yet consideration of the information released by criminal settlement through a plea or DPA does not reveal any systematic differences between the content, reliability or salience of the information produced. Thus, holding all else equal, information released by a criminal settlement should produce the same reputational damage cost whether the settlement occurred through DPA or plea.

4.1.1. Content and Reliability of Settlement Documents and Press Releases

Our assessment of the direct revelation hypothesis necessarily begins with consideration of whether there are any systematic differences in the content and reliability of the documents that are publicly released when the government announces a guilty plea or DPA. These documents include the criminal settlement itself, the government's press release, and any press releases issued by the company.

[36] To be sure, the sequence of information events can affect the value of each to the outsider in forming beliefs about the chance of a repeat offense. Indeed, studies of the stock price impact of news about corporate criminal settlements have typically relied on news dates prior to the final settlement announcement to evaluate the implications of the settlement for shareholder wealth (see, for example, Alexander 1999, Alexander and Cohen 1999).

Turning first to the criminal settlement itself (and in turn the press releases), we see that both types of resolutions trigger the same disclosure of facts. Both types of criminal resolutions include the same information about the nature of the crime, and potential aggravating and mitigating factors, including post-crime reforms. Both provide (1) a detailed discussion of the facts of the crime, including the number of offenses, their duration, locations, and involvement of senior management; (2) the charges filed;[37] (3) the firm's admission of wrongdoing; (4) a discussion of the quality of the firm's compliance program at the time of the offense and its response to the crime (including voluntary reform);[38] (5) sanctions imposed[39] including details of any mandates imposed. In both cases, the details of the resolution not only are disclosed in the agreement, but also are presented in prosecutor-issued press releases and press conferences. Thus holding constant the nature of the crime, aggravating and mitigating factors and the sanctions, there is no basis for concluding that the settlement documents, press releases, and press coverage contain any more evidence relevant to the risk to interested outsiders of dealing with the firm.

Notwithstanding the similarity in the facts reported, criminal convictions could produce greater reputational damage costs if the factual statements of guilt are more reliable when the firm is convicted because firms are less likely to improperly convicted than to be improperly sanctioned for an offense through a DPA. One possible source of differential reliability could be the standard of proof and identify of the decision-maker. Convictions arguably would be less likely to produce false positives if predicated on a finding of guilty beyond a reasonable doubt by an independent external arbiter—such as a judge or jury. Yet when we examine the large firms potentially subject to DPAs, we see that there is no such difference in the reliability of the facts.

Almost all convictions of publicly held firms involve guilty pleas carefully negotiated with a prosecutor in the shadow of the cost and risk to both sides of going to trial. Thus, both criminal pleas and DPAs involve statements of facts, charges, and sanctions that were negotiated by the prosecutor and the corporation. In neither situation are the facts of the crime proven and validated by an external arbiter such as a judge or jury.

Nor does the decision to convict automatically signal that the evidence of guilt is

---

[37] To be precise, DPAs include a statement of the charges filed. With an NPA, formal charges are not filed but the agreements regularly discuss the crimes prosecutors and firm agree charges could be filed for.

[38] For example, although the Organizational Sentencing Guidelines formally apply only to guilty pleas, prosecutors entering into DPAs can and do reference them. As a result, in the course of justifying the sentence imposed, both forms of settlement tend to discuss the mitigating and aggravating factors in the Organizational Sentencing Guidelines, including whether the crime involved high level or supervisory personnel, whether the firm had an effective compliance program, whether management detected and self-reported the wrong, corporate cooperation, remedial measures, and whether responsible individuals were terminated. Accordingly, both types of agreements tend to provide the same information on aggravating and mitigating factors.

[39] Prosecutors can impose the same magnitude of monetary sanctions and the same mandates whether they enter into a guilty plea or a DPA.

stronger, as would be the case DPAs were reserved for cases that prosecutors are concerned they might not win at trial. Prosecutors are not supposed to seek either a conviction or a DPA unless the prosecutor believes she could establish the crime beyond a reasonable doubt. The legal standard for determining whether the firm engaged in misconduct under the two types of agreements is the same: respondeat superior. Furthermore, the U.S. Attorney's manual explicitly encourages prosecutors to seek alternatives to conviction even when there is incontrovertible evidence that the firm could be convicted of the crime. Prosecutors deciding whether to convict or use a DPA are directed to focus on mitigating considerations such as the firm’s compliance program, corporate self-reporting, full cooperation, and collateral consequences.

Of course, firms subject to DPAs often will have more mitigating factors and lower aggravating factors and monetary sanctions because prosecutors are encouraged to considered deferred prosecution for firms with effective compliance, self-reporting, and cooperating.[40] As a result, interested outsiders may conclude they face less risk of future harm from such firms. Yet this does not imply that the prosecutors’ choice to use a DPA itself reduces reputational damage costs. Instead, publicly-announced facts about mitigating circumstances that signal to interested outsiders that the firm has a lower risk of committing a future violation also can lead prosecutors to select a DPA. In this case, it is the publicly-announced facts, not the choice of resolution form, that affect reputational damage costs. A guilty plea with identical mitigating factors should produce identical reputational damage costs.

Finally, we must consider whether pleas provide more reliable evidence of guilt because firms with a plausible claim of innocence might be likely to settle rather than going to trial when settlement involves a plea than when it involves a DPA. This would be plausible if firms do not incur any material enhanced risk of collateral penalties (or other serious sanctions from going to trial relative to settling through a plea because pleas inevitably trigger the same risk of collateral penalties as conviction through trial. Yet in practice this channel should not produce a systematically stronger signal for pleas. Prosecutors seeking to induce settlement regularly can provide similar incentives for a firm to settle instead of go to trial, whether the prosecutor is pursuing a plea or DPA. This is obviously true for crimes that do not trigger collateral penalties, since pleas and DPAs can impose the same sanctions. Yet prosecutors also can provide strong incentives to settle crimes that potentially trigger collateral penalties through their ability to structure the agreement to mute or negate collateral penalties. In some cases, prosecutors can select charges that do not trigger collateral penalties. Alternatively, they can either direct charges at a sub-unit of the firm whose debarment would not impose material costs[41] or obtain a commitment from regulators not to debar the firm.[42] Finally, they can offer other material inducements, such as lower monetary sanctions and an agreement not to impose

40 USAM XX. Alexander and Cohen (2015) compare the frequency of reform requirements under DPA with what occurs under Plea in a sample of public companies, 1997-2011.

41 See, for example, the conviction of Pfizer.

42 See BNPP Paribas and Creditte Suisee

a monitor. Thus, whether entering into a DPA or a plea prosecutors have the ability to offer a strong inducement to settle—an inducement sufficient to bring a reluctant firm with a plausible chance of winning at trial to the table. As a result, the reliability of statements that the firm committed a particular crime does not appear to be systematically greater when the firm pleads guilty than when it is subject to a DPA.

4.1.2. Salience of the Criminal Settlement

Of course, guilty pleas could produce greater reputational damage costs if guilty pleas (and the negative facts they contain) receive more media attention than DPAs. While in the end this is an empirical question, we see no a priori reason for this to be true. Media coverage tends to focus on events that are of significant interest to investors and the public at large. Coverage thus appears to depend on factors such as whether the firm is publicly traded, the size of the firm, the importance of the products produced, the harm caused, the magnitude of potential and actual sanctions, and the type of charges. Cases involving serious allegations and substantial sanctions against a high-profile publicly held firm will receive substantial media attention, whether it was resolved through a DPA or a plea. For example, DPAs with J.P. Morgan Chase, Toyota Motors, and General Motors were widely covered in national papers and national TV shows. By contrast, criminal settlements with small firms imposing small sanctions receive little press, even when the firm is convicted (as with Four Seasons Property Services Inc. and Medex Ambulance Inc.). Thus, significant cases get coverage even if they involve a DPA and non-salient ones will not, even if they involve a plea.

In conclusion, analysis of the information produced by a conviction or DPA in and of itself points to rejection of the hypothesis that conviction causes more costly reputational damage to the firm through the release of facts at conviction than is produced through release of the identical facts and sanction accompanied by a DPA settlement.

4.2 Prosecutor Selection: Does Conviction Reveal the Prosecutor’s Hidden Information about the Risk of Repeat Wrongdoing?

As we have seen, the content and salience of the public statements in the criminal settlements documents relevant to the firm's future risk of misconduct does not depend on the choice of settlement form. Thus, the argument that conviction produces higher reputational damage costs must depend on whether information is revealed through a channel other than these public statements.

One possible channel is the signals sent about the firm by the prosecutor's decision to use a plea instead of a DPA. Firms that are convicted could bear greater reputational damage costs if interested outsiders reasonably and accurately expect prosecutors to insist on a guilty plea when they observe undisclosed information consistent with the firm being more likely to harm counter-parties in the future (*prosecutor selection* hypothesis). This signal would lead interested outsiders to respond more negatively to firms that are convicted if the hidden factors that lead prosecutors to convict also indicate the firm has a higher risk of harm.

Thus, the prosecutor selection hypothesis requires that five conditions be met.[43] First, the prosecutor's decision whether to convict is not determined solely by facts contained in their public statements but also depends on hidden information. Second, the non-public consideration that materially affected the decision to convict also bear on the firm's future risk of misconduct—are in the set of factors discussed in Section 3. Third, interested outsiders can infer when the prosecutors' choice is not fully explained by her public statements. Fourth, in this situation, interested outsiders observing a decision to enter into a plea (DPA) can reasonably infer that the prosecutor's choice to convict was determined by hidden information that indicates that the firm has a higher risk of future misconduct. Finally, this signal provided by the decision to convict is not outweighed by a countervailing signal of the prosecutors' expectations of future offense risk, such as a decision not to impose any of the mandates (e.g., a monitor) that the prosecutors' office normally imposes when resolving matters with a firm with an enhanced risk of future harm.

Fortunately, many of the considerations that potentially influence prosecutors' choice between DPA and conviction are a matter of public record. The U.S. Attorney's manual Principles of Federal Prosecution of Business Organizations (the "Principles")[44] applies to most of the criminal cases that are prosecuted by the attorneys of the Department of Justice and its U.S. Attorneys' Offices. This manual instructs prosecutors on the factors that they should consider in deciding whether to convict or whether to settle using a DPA versus a traditional plea agreement. As such, it brings to light some of the information that prosecutors may consider, even if not all of it will be detailed in the settlement agreement.[45] Interested outsiders also may take into account strategic considerations likely to affect prosecutors' choices. To the extent that enforcement policy and strategic concerns lead prosecutors' to predicate the decision to convict on a predictable and discrete set of considerations, a prosecutors' choice to require a plea can signal her hidden information relating to these factors. This signal could enhance the cost of reputational damage if, but only if, the determinative factors coincide with those that indicate that the firm has a high chance of a repeat offense.

Evaluating prosecutors' decisions under the Principles, we conclude that prosecutors' decisions to convict do not signal that the firm has an enhanced risk of future harm because the primary determinants of whether a firm is convicted are considerations

[43] In other words, the central questions is whether the negotiation process produces a Perfect Bayesian Separating equilibrium in which interested outsiders accurately predict that prosecutors consistently target high risk firms for conviction.

[44] U.S. Attorney's Manual, 9-28.000. https://www.justice.gov/usam/usam-9-28000-principles-federal-prosecution-business-organizations

[45] To be sure, prosecutors have many sources of guidance to consider in making choices at settlement. The U.S. Attorneys Manual is a natural source to consider because it has been adopted by X Y and Z for use by the prosecutors in those organizations. Other organizations have issued different guidelines for their attorneys. The differences between them do not suggest a different conclusion. We accordingly focus on the USAM here. For a review of the UASM in the context of the choice between DPA and Plea, see Alexander and Cohen (2015).

that do not strongly indicate the firm has an enhanced risk of future harm. Moreover, in the same document, interested outsiders often receive a more direct signal of whether the prosecutor believes the firm had an enhanced risk of future misconduct at the time of the criminal settlement: the prosecutors' decision whether to impose mandates. Prosecutors' decision whether to impose mandates—whether through is a plea or a DPA—arguably is (or should be) the most direct evidence of whether the prosecutor concluded that the firm did not face an enhanced risk of future misconduct, or instead that management could not be relied on deter future misconduct absent additional intervention would be needed to deter future misconduct (see generally Arlen and Kahan 2017).

4.2.1. Prosecutors' Decisions Under the U.S. Attorney's Manual

Most corporate criminal settlements are governed by the Principles of Federal Prosecution of Business Organizations contained in the U.S. Attorney's manual (the "Principles").[46] The Principles set forth 10 factors that prosecutors generally should consider when deciding whether to convict (9-28.300). These ten factors are (1) The nature and seriousness of the offense including the harm to the public; (2) the pervasiveness of the wrongdoing within the firm and managers complicity in perpetrating or condoning the crime; (3) the corporation's history of similar misconduct; (4) the quality of the compliance program at the time of the misconduct; (5) the firm's timely and voluntary disclosure of wrongdoing; (6) the firm's remedial actions including compliance program reform, actions against individuals, and restitution; (7) corporate cooperation; (8) whether agencies' regulations provide that conviction for the offense triggers mandatory or permissive debarment or delicensing, and thereby impose disproportionate harm on shareholders, employees, customers, pensioners or others who were not personally culpable; (9) the adequacy of other remedies, such as civil or regulatory enforcement actions; and (10) the adequacy of individual prosecutions.

Examining the USAM factors we reach three important conclusions. First, prosecutors' decisions to convict regularly rest on considerations that are not fully disclosed in the criminal settlement documents. Second, this hidden information can include information that indicates the firm has a greater risk of future misconduct than would be expected from public statements. Nevertheless, interested outsiders are unlikely to treat the decision to convict as a signal that the firm is more likely to harm them because prosecutors' decisions regularly are likely to be predicated (1) entirely on publicly disclosed factor or on (2) hidden information with no bearing on the risk of future misconduct. As a result, even when the decision to convict likely rests on hidden information, interested outsiders will not assume the evidence indicates a higher risk of future harm.

Private Information Potentially Influencing Settlement Form

[46] U.S. Attorney's Manual, 9-28.000. https://www.justice.gov/usam/usam-9-28000-principles-federal-prosecution-business-organizations

Prosecutors' decisions to convict are potentially affected by four types of public information, only one of which indicates the firm has a higher risk of future misconduct.

Prosecutors entering into criminal settlements are expected to consider, and publicly discuss their findings with respect to the USAM factors in their criminal settlement agreements.[47] Nevertheless, these public statements often do not reveal all the information about the USAM factors that affected the decision. Criminal settlements tend to state the prosecutor's ultimate conclusion without providing all the observations relevant to the seriousness of that conclusion. Prosecutors also regularly do not disclose other material information that falls outside the terms of the agreement: such as the full extent of detected but uncharged misconduct, detailed evidence on the complicity or inattention of uncharged individuals, concerns about the completeness of any self-reporting, details on genuineness and completeness of corporate cooperation, and the basis for prosecutors' assessment of managements' commitment to deterring misconduct going forward.

For our purposes, hidden information about evidence supporting prosecutors' statements regarding the USAM factors is properly divided into two types. The first type is information that correlates with a risk of future misconduct: this is hidden information relating to factors (1)-(6) in the preceding list. The second type is hidden information about factors that have no bearing on the future risk of harm. This includes hidden information on the strength of the firm's concerns about the threat of collateral sanctions which provide no signal about the probability that this firm could harm an interested outsider who chooses to contract with him. Hidden information on the value to prosecutors of corporate cooperation also may have no bearing on the risk of future misconduct, as explained below.

These types of hidden information are not the only considerations that may determine whether a prosecutor, present with a firm with a particularly set of publicly-disclosed facts, resolves the case through a plea or a DPA. In situations where the USAM factors do not all favor the same choice, the decision to convict will depend on an additional consideration: the subset of factor(s) that this prosecutor deems to be most important to the decision whether to convict. The prosecutors' own view of how to weigh the various USAM factors matters because the USAM grants prosecutors full discretion as to how to weigh the facts. Indeed, the USAM does not tell prosecutors what policy goal is primary (e.g., general deterrence vs. resolving this case) when weighing the USAM factors. Thus, prosecutors can place primary weight on the USAM factors that they deem to be most important (see Arlen 2016). As a result, a prosecutor can employ a DPA even when all but one of the USAM factors favor conviction if one factor that the prosecutors accords primary weight to (e.g., collateral consequences) factors a DPA. To the extent that prosecutors' choices depend heavily on knowledge about which, if any,

[47] Prosecutors disclose their conclusions regarding the USAM factors both in the course of discussing the choice of resolution and also when presenting criminal fine calculations under the U.S. Sentencing Guidelines Governing Organizations.

factors are outcome determinative, prosecutor's hidden information about their own decision-making processes will be outcome determinative. But the relevant hidden information—about the weight accorded each factor—does not itself bear on the firm's underlying risk of misconduct.

Finally, prosecutors selecting between conviction and a DPA can be expected to consider a variety of other factors, most of which have no bearing on the firm's likelihood of committing future misconduct. The USAM explicitly authorizes prosecutors to consider factors in addition to those listed in the USAM.[48] As a result, prosecutors can legitimately take into account how the decision to convict or use a DPA will affect their own welfare. Prosecutors can be expected to care about their ability to resolve the case expeditiously, the deterrent value of sanctions imposed, their ability to facilitate restitution to victims, and the response to the settlement both within the DOJ and by the public. Prosecutors' choice of settlement form will be impacted by their hidden information about both the set of strategic and personal concerns that are most salient to them and facts about the case, such as the availability of the evidence or scope of uncharged misconduct, that bear on these considerations. To the extent these considerations are outcome determinative, conviction decisions will rest on hidden information but will not provide a signal relevant to the firm's risk of future misconduct.

Accordingly, although prosecutors' decisions regularly are affected by hidden information, this does not establish that conviction reliably signals that the firm presents an enhanced risk of future misconduct because three of the four potentially influential types of information are unrelated to the risk of future harm. Accordingly, to assess the prosecutorial selection hypothesis we must examine prosecutors' decision-making to determine when, if ever, the decision to convict is likely determined by hidden information relating to the factors identified in Section 3. To do this, it is useful to separately consider two types of cases. Those where the USAM factors all point in the same direction and those where they do not.

All USAM Factors Favor The Same Choice of Settlement Form

There are situations where all the publicly-available facts favor one choice or the other. In this situation, interested outsiders cannot glean any hidden information bearing on the risk of harm from the prosecutors' decision whether to convict but instead must rely on the public disclosures. As a result, the decision to convict or not will have no effect on reputational damage cost through the prosecutorial selection channel.

Interested outsiders cannot obtain a signal relevant to reputational damage from a prosecutor's choice of settlement form when all the publicly disclosed facts about the

[48] US Attorney’s Manual, Principles of Federal Prosecution of Business Organizations, § 9-28.300 (comment b) ; see US Attorney’s Manual, Principles of Federal Prosecution of Business Organizations, § 9-28.900 ("Prosecutors have substantial latitude in determining when, whom, how, and even whether to prosecute for violations of federal criminal law. In exercising that discretion, prosecutors should consider the following statements of principles that summarize the considerations they should weigh and the practices they should follow in discharging their prosecutorial responsibilities.").

USAM factors and other considerations favor the choice the prosecutor made. Absent a divergence between public disclosures and the choice made interested outsiders have no reliably basis for estimating the prosecutors' hidden information. After all, this situation is consistent with a host of possibility. The prosecutor could have had (i) no hidden information, (ii) hidden information favoring the decision made that is unrelated to the risk of harm, (iii) hidden information favoring the decision that is related to the risk of harm, (iii) hidden information that weakly favors the alternative choice, that could be related to the risk of harm or to other considerations, or (iv) hidden information relating to the risk of harm that strongly favors the alternative choice, coupled with hidden information that the prosecutor predicates the decision whether to convict based on other factors that are not related to the risk of harm.

As a result, we would expect the publicly disclosed facts, and not the actual decision to use a DPA, to determine the reputational damage cost produced by a criminal resolution in which a firm, with no prior criminal settlements, is sanctioned for isolated misconduct involving non-executive employees, which the firm detected through its well-funded compliance program and then self-reported, following a full investigation that it shares with prosecutors—especially if the firm could face collateral consequences if convicted. In this case, all the USAM factors favor use of a DPA. Similarly, when the criminal settlement documents reveal that a firm would not be subject to collateral penalties if convicted, has multiple past violations, engaged in long-standing wide spread misconduct involving senior managers, detected but did not remediate or report the misconduct, and obstructed prosecutors' investigation instead, interested outsiders can be expected to predicate reputational damage costs on these publicly disclosed facts, and not on the prosecutors' ultimate decision to convict as this decision is so fully determined by the publicly-disclosed facts that nothing can be inferred about the firm's future riskiness.

Nor can interested outsiders infer anything relevant to reputational damage costs from the fact that the prosecutor make a choice consistent with the USAM factors and not contrary to them. When all USAM factors point in the same direction, a contrary decision would not be based on hidden information about the strength of the conclusions or their weight, since weight is irrelevant when all factors point in the same direction. Instead, absence of a decision contrary to the USAM factors most strongly signals that the prosecutor did not have any strategic or public perception reasons to select a resolution contrary to that indicated by the ten factors. In others words, the prosecutors' decision to conform to the USAM provides a signal about the absence considerations upon which interested outsiders place no weight in assessing reputational damage costs.

Accordingly, absent a clear signal concerning hidden information about the risk of harm, interested outsiders can be expected to focus on publicly-disclosed indicators of risk, including both the public statement regarding the USAM factors and whether enforcement official (criminal or civil) impose enhanced mandates, such an external monitor or enhanced reporting to regulators. The choice to convict will have no independent effect through this channel.

When Not All USAM Factors Favor the Same Choice

We now consider whether the prosecutors' choice of criminal settlement can signal information to interested outsiders in situations where the publicly disclosed facts—and in particular the ten USAM factors—do not all favor the same choice. This situation could arise for one of three reasons, only one of which supports the prosecutorial selection hypothesis. First, the prosecutor might have hidden information supporting her choice relating to one of the USAM factors that correlates with the risk of future harm. Second, she might have hidden information supporting her choice that relates to either a USAM factor or strategic considerations with no bearing on the future risk of misconduct. Finally, the prosecutor might have fully disclosed all the evidence on the USAM factors, but predicated the choice whether to convict on only one (or two) of these factors. Assuming this weighting is based on policy or strategic concerns, information about it should not affect reputational damage costs.

Interested outsiders can be expected to estimate which type of considerations most likely affect prosecutors' decisions by estimating what considerations would be particular salient to a prosecutor seeking to maximize his own welfare. The concerns that could animate a prosecutor are manifold including general and specific deterrence, payment of restitution to victim, achieving a reasonably expeditious resolution with appropriate sanctions, enhancing standing in the DOJ, achieving public recognition, and retribution against the firm (and its shareholders) for its bad conduct.

Absent contrary evidence, it is reasonable to conjecture that prosecutors will place particular weight on how the choice of settlement form will impact their ability to obtain a resolution in this case—a consideration relevant to both deterrence and their personal enforcement objectives. Focus on strategic considerations implies that one factor is likely to dictate whether a prosecutor will consider conviction: existence and cost to the firm and the public of collateral consequences. Specifically, interested outsiders can reasonably expect prosecutors to avoid plea agreements with firms that could be subject to criminal sanctions if convicted—regardless of other factors (except in particular circumstances discussed below). There are several reasons for this. First, is that prosecutors' desire to resolve matters expeditiously will naturally disincline them to insist on a guilty plea when doing so would strongly motivate the firm to resist settlement, limit its cooperation, and perhaps even consider taking the case to trial (unless offered a plea that eliminates or mutes the collateral sanctions). Second, the prosecutor likely will want to avoid the added adverse publicity triggered by a decision that threatens to debar or delicense a firm that provides valuable goods and services to the public. Finally, eschewing a plea may enhance the prosecutor's ability to achieve other objectives, since firms that derive a large benefit from avoiding a plea can be expected to agree to pay larger sanctions and restitution in return for a DPA.

Thus, prosecutors presented with a firm that would be threatened by collateral consequences have strong incentives to use a DPA, even if the information available to the prosecutor indicates that the firm has a heightened risk of future misconduct. The prosecutor can more effectively address this risk by employing a DPA with mandates specifically designed to deter future misconduct. These include mandates that materially enhance the firm's compliance program, restrict its ability to engage in risky business activities, or impose an external monitor (see Arlen and Kahan 2017). As a result, in this situation, interested outsiders should not impose lower reputational damage costs upon news that the prosecutor employed a DPA because they will reasonably attribute this decision to the threat of collateral penalties[49]—a factor which does not bear on the risk of future harm. [50] As a result, reputational damage costs will be predicated on information learned from the facts disclosed in the criminal settlements, as well as the signals relating to future riskiness produced by the prosecutors' choice of what mandates to impose. The DPA itself should have no effect. [51]

Prosecutors' decision to whether convict also may Convictions also may depend heavily on collateral penalties imposed by foreign jurisdictions when a US plea might trigger such sanctions in a jurisdiction that is material to the firm's welfare. To the extent that these collateral consequences are a serious threat to the firm, this factor may well become particularly salient to prosecutors. While it is true that the prosecutor who cares

[49] Consistent with our analysis, the General Accountability Office examined DPAs and identified collateral penalties as the central consideration in determining whether a firm gets a DPA (see GAO Report 2009, identifying collateral consequences as a central consideration in the decision to impose DPAs). Alexander and Cohen also provide evidence that is consistent with our conclusion. Two types of cases often (but do not always) risk triggering collateral penalties: fraud cases and cases involving financial institutions. Our analysis implies one would expect a high rate of DPAs in such cases. Consistent with this, from 2007 to 2011, 68.4% of the fraud cases and 78.6% of the anti-money laundering cases were resolved through DPAs (Alexander and Cohen 2015, p. 571). Our analysis also suggests that should be more inclined to use DPA with parent firms who do some business in the U.S. and would be less reluctant to employ a plea with a foreign subsidiary. While we do not have evidence directly bearing on this, Alexander and Cohen did find that prosecutors settling with parent companies and subsidiaries jointly enter into DPAs with 61% of the parent while using guilty pleas against the vast majority of the subsidiaries (Alexander and Cohen 2015, p. 580).

[50] Firms that could be subject to collateral consequences if convicted do not intrinsically have a higher risk of misconduct because this factor depends on whether the settlement involves the type of crime (e.g., fraud) and the type of firm (e.g., pharmaceutical firm) that fall under regulations giving regulators authority to impose "mandatory" or permissive exclusion. Firms can be expected to strongly resist convictions that could trigger collateral consequences, even if they are confident the agency will ultimately waive their imposition, because even the threat of such sanctions, and the interim period of uncertainty, can be very costly for firms when attempting to make decisions governing future time periods (since debarment could dramatically change the firm's demand supplies and employees).

[51] While a decision to do a DPA is not a favorable signal, a decision to convict in this situation might be negative, but we conclude that this is unlikely. Prosecutors can be expected to convict, notwithstanding collateral penalties, if the prosecutor is a repeat player, the firm actively impeded the investigation, and the prosecutors can structure the deal to mute or eliminate the collateral penalties. The first and last of these factors has no bearing on the risk of future misconduct, but the second one might. Yet even here we expect the signal to be weak or non-existent, depending on the circumstances. A firm's refusal to cooperate in the way favored by US prosecutors may provide a negative signal that the firm has a weak attitude toward compliance. But this is not the strongest factor on this issue. Many firms with DPAs will have a greater risk of future misconduct. Moreover, failure to cooperate is not always a negative signal because there are other explanations. These include that the firm faces limitations on its investigations arising from foreign laws, foreign regulators or simply has no prior experience or genuine understanding of how to deal with U.S. enforcement authorities.

about U.S. citizens may not be directly influenced by these costs, the prosecutor may well be influenced by the impact of these costs on the firm's approach to the negotiation. Unless the prosecutor derives particularly strong utility from conviction—as compared with other aims (such as sanction magnitude, restitution, monitors, and speed of resolution)—the prosecutor will have strong incentives to favor DPAs in this context in order to achieve these other aims.

Interested outsiders' response to a decision to convict or use a DPA must be predicated on a more nuanced view of prosecutorial decision-making when considering decision by a prosecutor's office that is a repeat-player, in that it regularly negotiates criminal settlements. Prosecutors in these officers should care about both the case before them—which focuses attention on collateral penalties—and on inducing firms to help their efforts to resolve future cases. As a result, in addition to collateral consequences, they will tend to use the choice of settlement form to reward firms that self-report and punish those that either do not report detected misconduct or refuse to cooperate with the government's investigation.[52] Consequently, interested outsiders observing this type of prosecutor entering into a guilty plea against a firm who could face collateral consequences should reasonably assume that the firm refused to fully cooperate or otherwise actively impeded the investigation.

The decision to convict in this situation plausibly will signal the prosecutors' conviction about the inadequacy of the firm's cooperation. This in turn could signal that the firm has a higher risk of future misconduct. This could occur if managers who refuse to cooperate also tend to establish ineffective compliance programs and engage in other conduct that could promote misconduct. Of course, corporations also can resist for other reasons: for example, they may feel unfairly treated, be unaccustomed to the US approach to corporate investigations, or be governed by foreign laws (or subject to instructions from foreign enforcers) that limit their ability to fully cooperate. Moreover, any signal sent by news of conviction may be muted by signals sent by other decisions. First, prosecutors imposing pleas on firms that could be subject to collateral penalties regularly structure them to mute or eliminate the collateral penalties. This can be accomplished through strategic selection of charges, by asking the relevant agency to waive collateral penalties ex ante (e.g., Creditte Suisse and BNPP Paribas), or by convicting a subunit within the firm whose debarment would have little impact on U.S (e.g. Pfizer). These actions arguably signal that the prosecutor does not believe that the firm is too risky to serve its market. Second, prosecutors signal their beliefs about future risks through the mandates they impose. Interested outsiders observing a conviction which does not impose serious compliance program reforms and a monitor may reasonably conclude that the conviction does not signal the prosecutors' beliefs about the future risk of harm. Those observing the mandates may well impose enhanced reputational damage costs, but arguably similar to those that would accompany a DPA

[52] Consistent with this, the Fraud Section's Pilot Program places particular emphasis on whether a firm self-reported. This can impact the type of resolution, magnitude of the fine and whether a monitor is imposed. See Fraud Section Pilot Program.

with similar mandates. The mandates provide a stronger signal about prosecutors' evidence on future riskiness than the decision whether to convict.

The final set of cases are those where no collateral penalties are involved. We conclude that the prosecutorial selection hypothesis generally is not satisfied in this situation because interested outsiders cannot easily distinguish the cases where prosecutors' decisions are driven by factors that correlate with the risk of future misconduct from situations where they are focused more on factors relating to strategic concerns. There is no doubt that a prosecutors' decision whether to convict may rest on considerations relevant to the magnitude of the reputational damage. But it also may rest on a prior decision to give primary weight to a particular factor that, in this case, favors the choice made. Finally, strategic considerations may drive the choice. These can include whether the case would be difficult or costly to bring to a jury, whether the evidence is readily available, the strength of the case, and whether the firm cares enough about avoiding conviction to agree to a quicker resolution with higher penalties in return for a DPA. These considerations, which are unrelated to the risk of future harm, are as if not more likely to have affected the choice as those that bear on the risk of future misconduct.

Thus, evaluating the enforcement policy that generates most of the DPAs, we conclude that prosecutors do not impose lower reputational damage costs when they impose a DPA instead of a plea because their decision to make this choice does not produce a signal that impacts expectations of future wrongdoing. Prosecutors' belief about the firm are more clearly signaled by their decision to use certain types of enhanced mandates—a decision that need not depend on the form of the criminal resolution.

4.2.2. Other Enforcement Policies

The USAM is not the only policy governing prosecutors' decisions whether to convict or employ a DPA. Other divisions within the DOJ—such as the antitrust division and the environmental division--have their own policies governing whether a firm seeking to resolve a criminal matter must plead guilty. These policies produce a much stronger presumption in favor of conviction. It is worth noting that this stronger presumption makes it even less likely that the decision to convict will cause the firm to suffer heightened costs from reputational damage through the prosecutorial selection channel. If prosecutors almost never select a DPA—or do so based on criteria that do not separate high risk from low risk firms—then interested outsiders cannot glean any hidden information relating to risk of future misconduct from a prosecutor's decision to convict.

To see this, it is useful to briefly consider the leniency policy announced by the Antitrust Division. Under this policy, one fact above all others determines whether a firm is eligible to receive a DPA: did the firm report the antitrust violation *before* any other firm reported it. Reporting the violation immediately upon detection by senior management, but after another firm, will not suffice.[53] Given this, the decision whether to

[53] The Antitrust Division's policy is available at https://www.justice.gov/atr/page/file/926521

convict does not high risk from low risk firms. Indeed, it only weakly distinguishes firms willing to self-report from those that do not. Thus, conviction provides a signal, but the signal relates to whether the firm reported first, and not to whether the firm has a heightened risk of future misconduct.[54]

4.2.3. Summary

Thus, we conclude that the relationship between future risk and the decision to convict that must be present in order to establish the prosecutorial selection hypothesis generally are not met. Hidden information clearly does affect the decision whether to convict. But the most salient considerations often are unrelated to the risk of future misconduct. In other situations, prosecutors appear to focus on one relevant consideration with no guarantee that the firms with this factor have higher over all future risk than those that do not. Given the difficulty of deriving a clear signal, we expect that interested outsiders would reasonably look to stronger, more direct, signals of prosecutors' concerns about the future behavior of the firm. These include the mandates prosecutors impose. Certain ones of these mandates may well affect reputational damage costs, even if the decision whether to convict or use a DPA generally should not.

4.3 Management Selection: Does Conviction Reveal the Management's Resistance to Reform and the Risk of a Repeat Offense?

Managers also affect whether the firm receives a guilty plea or a DPA.[55] Thus, we must consider whether the choice could reveal management's hidden information relevant to the risk of future misconduct (Managerial Selection Hypothesis).

For the Managerial Selection Hypothesis to hold three conditions must be met. First, managers' decision whether to accept a plea must depend on hidden information. Second, interested outsiders can predict the factors that would lead management to accept a conviction instead of a DPA. Third, the factors likely to lead to a guilty plea also correlate with a higher risk of future wrongdoing.

To evaluate this hypothesis, it is instructive to first identify the hidden information that could both potentially lead management to be less resistant to a plea and indicate a higher risk of misconduct. Since we are focused on the reputational damage cost triggered by the decision to enter a plea in and of itself—holding constant all other

---

/download

[54] Consistent with this, Alexander and Cohen found that 95% of criminal antitrust cases against publicly held firms resolved from 1997 to 2011 were resolved through guilty pleas; the only other formal sanctions were done through NPAs (Alexander and Cohen, 2015, p. 571).

Given that the antitrust policy favors either declination or conviction, interested outsiders may clean some information from a decision to grant an NPA (or in turn not to). Looking at the NPAs….

[55] Managers can influence the outcome in two ways: directly through their stance during the negotiation and indirectly through decisions they make regarding the compliance, the investigation, self-reporting, and remediation. We focus on the former because managers' pre-negotiation actions are only relevant if those actions have a predictable systematic effect on the prosecutors' decision to pursue a conviction or a DPA in ways that correlate with a higher risk of future wrongdoing. Were this the case, we would expect the Prosecutor Selection Hypothesis to hold.

publicly disclosed facts in the agreement—we first consider management's choice when the choice does not affect sanctions imposed on the firm or individuals.[56]

4.3.1. Conviction Does Not Alter Sanctions Imposed

Accordingly, we first evaluation the managerial selection hypothesis assuming that the decision whether to convict does not alter public statements about the facts of the crime, the charges filed, the aggravating and mitigating factors, the appropriate monetary sanctions and the mandates imposed.

To assess the managerial selection hypothesis, we must evaluate the factors that could influence management's choice when management can influence the outcome. Thus, we consider the factors that might lead management to accept a plea when they could have obtained a DPA, or alternatively to push harder than average to obtain a DPA instead of a plea. Management often will consider hidden information about considerations that impact the firm's welfare. These include whether conviction could trigger collateral penalties in the US or abroad. Management that anticipates high costs will push harder to avoid a plea. Management that anticipates that all collateral sanctions will be waived may not resist at all. As a result, convicted firms subject to pleas would be those less likely to have collateral penalties actually imposed. Firms subject to a DPA would face a heightened risk of bearing penalties. Assuming that federal agencies resist waiver for high risk firms, this hidden information would lead managers of lower risk firms to plead guilty—translating into lower (not higher) cost of reputational damage for convicted firms.

Managers' hidden information about the firm's willingness to go to trial also should impact their resistance to a prosecutor's insistence on a plea. This does not support the managerial selection hypothesis. In some cases, management may have information that the firm would lose at trial. Yet in other cases, management may have enhanced incentives to settle based on hidden information about the cost to the firm of legal uncertainty. In addition, managers' hidden information on evidence that the firm committed the violation is at best a weak signal of the risk of future harm to an interested outsider because this depends on aggravating and mitigating factors, and can be impacted by post-crime reforms (see Section 4.4 infra).

Of course, managers' decisions also may be impacted by agency costs. For example, they may resist pleas that would trigger collateral penalties, even if the penalty would eventually be waived, if the temporary disruption in business prior to waiver may result in their termination. Management also might resist a plea for personal reasons if management's compensation agreements place them as greater risk of a clawback or loss of unvested bonuses when the firm pleads guilty. Finally, a plea may negatively impact managers if, holding other considerations constant, managers expect outsiders to view a plea as a negative signal about their ability to negotiate with prosecutors.

[56] Individual convictions often follow corporate criminal settlements, instead of being resolved contemporaneously. Nevertheless, pre-Yates memo, corporate agreements have had terms stating that no individual convictions will follow.

Yet all of these agency costs would lead managers to resist a plea based on hidden information that is unrelated to whether the firm has a lower risk of future misconduct.[57]

4.3.2. Conviction Could Alter Charges and Sanctions

Managers may obtain personal benefit from accepting a plea, instead of resisting it, in situations where prosecutors have such a strong preference for conviction that they are willing to reduce the charges filed or the sanctions imposed in order to get a conviction. In this situation, management with high agency costs can be expected to accept a plea in return for prosecutors offering something of personal benefit to them. For example, management potentially implicated in the misconduct, might accept a conviction in return for an implicit understanding that no individual charges would be brought. If this occurs, then interested outsiders who anticipate this would treat a plea as a negative signal that the firm is at enhanced risk, assuming that individual liable has a material impact on the threat of corporate crime (Arlen 1994; Arlen and Kraakman 1997). This impact would result from the confluence of managerial and prosecutorial agency costs.

We think this particular manifestation of agency costs currently is not a significant factor determining whether a firm is convict. First, when management is implicated in a crime, boards should, and generally do, delegate oversight of the criminal investigation to a disinterested committee which faces pressures not to sacrifice the firm's welfare to benefit errant management.[58] In addition, the criminal division has adopted a policy favoring individual liability (the Yates memo) that enhances oversight of prosecutors' approach to individual defendants.[59]

Yet management may seek other concessions in return for a plea that confer a personal benefit. In particular, they may be willing to accept a plea in return for a prosecutor's willingness not to impose intrusive mandates, such as a monitor. Management serving their own interested may want to not have a monitor to reduce the enhanced oversight this entails. Of course, a prosecutor serving the public interest should not agree to this deal because meta-policing mandates, such as monitors, precisely when

[57] Management's hidden information on potential loss of compensation will depend on whether the firm has a clawback provision at all, whether it is limited to financial misstatements, and whether, if it goes beyond, it requires a corporate conviction. The nature of these provisions, as applied to a particular case, will not provide a strong signal about the risk of future misconduct---especially when the misconduct would not trigger a claw back under most firm's policies.

[58] This committee often has its own counsel. The committee is placed in charge of negotiations with prosecutors. The committee's express objective is to act in the best interests of the firm: for example, because it concluded conviction did not impose a materially greater penalty on the firm than a DPA. Boards that allow conviction in other circumstances could be subjected to shareholder scrutiny, absent evidence the prosecutor would accept nothing less. Second, should conviction threaten ruinous collateral consequences, other managers should be likely to resist.

[59] Observe that this basis for concluding that conviction produces higher reputational damage would undermine the claim that conviction enhances deterrence because conviction might trigger higher reputational damage costs while removing the vital deterrent effect of individual liability for those responsible for the crime (see Arlen 1994).

management is plagued by agency costs impacting internal governance relating to deterrence (Arlen and Kahan 2017).[60] Thus, prosecutors who accept this deal for their own personal benefit will leave the firm more likely to engage in future misconduct than if the prosecutor had used a DPA coupled with appropriate mandates. Interested outsiders who anticipate this trade-off can be expected to view conviction as a signal that the firm has a higher risk of future misconduct.[61]

The confluence of managerial and prosecutorial agency costs could produce an equilibrium where convicted firms are higher risk on average than DPA firms as a result of modifications made to the settlement agreement (relative to the DPA) that enhance the risk of future misconduct. Accordingly, in this situation, the plea would signal that convicted firms are at greater risk of misconduct through the managerial selection channel in situations where this trade off may well have occurred.

Yet this channel for reputational damage costs is not triggered by the imposition of the plea itself, but instead by the possibility that a prosecutor would be willing to sacrifice sanctions s vital to deterrence in order to obtain a conviction. To the extent that pleas impose enhanced costs of reputational damage through this channel, society would be better off by weakening prosecutors' motivation to obtain a plea, instead of enhancing them. These types of convictions should be discouraged, and not encouraged.

4.4. Dynamic Considerations: Impact of Reforms

The preceding analysis reveals that there is no basis for concluding that the decision to require the firm to plead guilty instead of using a DPA will affect the reputational damage costs imposed on the firm, holding constant all of the publicly-disclosed features of the firm, the crime, and the sanctions imposed. This conclusion is further strengthened once we move beyond the preceding static analysis to include dynamic considerations.

As discussed in Section 3, interested outsiders predicate their reputational damage cost on their assessment of the future risk of dealing with this firm. This assessment is based in part on information gleaned from the criminal settlement documents about the firm's past conduct and governance, both at the time of the crime and leading up to the criminal settlement. Yet interested outsider's assessment of the risk of future misconduct also should be based on credible information available at the time of the settlement, concerning future governance reforms likely to reduce the risk of wrongdoing. As discussed in Section 3, the likelihood of future misconduct depends on a variety of features of the firm that can be reformed. These include the tone set by senior management, corporate culture (Tyler; Simpson), whether the firm's compensation and

[60] This possibility is not entirely hypothetical. Alexander and Cohen (2015) provide evidence that mandates are more common in DPAs than in pleas.

[61] Interested outsiders cannot be sure that absence of a particular term is a negative signal, because mandates are not appropriate in all cases (Arlen and Kahan 2017). But they can infer from the bargaining game that management is more likely to obtain concessions that undermine deterrence if prosecutors place a high value on obtaining a conviction.

promotion incentivizes employees to meet certain targets at all cost (Arlen and Kraakman 1997), effectiveness of ethics training and effective compliance programs (e.g., Arlen 1994; Arlen and Kraakman 1997; Alexander and Cohen 2011), and internal and external measures that reduce agency cost that impact corporate policing (Arlen and Kahan 2017). When properly employed, these interventions can significantly reduce the firm's likelihood of future misconduct below what would be expected otherwise. In other words, through such reforms firms may be able to change their risk profile, even though the name of the firm and most employees remain unchanged. Interested outsiders observing information that a firm plans to implement such reforms are likely to adjust their beliefs towards a lower risk of harm, if the announcement is credible and the reforms appear to be effective.

The ability to fundamentally alter the firm's future propensity to commit wrongdoing is important to the debate over conviction versus DPAs because most corporate criminal settlements—certainly for more significant offenses-- not only impose monetary sanctions, but also both disclose and impose reforms designed to reduce the risk of a future violation in a variety of ways. Corporate criminal settlements regularly provide information about the reforms the firm implemented voluntarily. This includes information about employees who were terminated as a result of the misconduct, as well as other changes in management. These settlements also regularly mandate reforms. Prosecutors who conclude that the firm is at enhanced risk of wrongdoing, impose reforms that alter the internal governance of the firm (see Alexander 1999, Arlen and Kahan 2017, Alexander and Cohen 2015). These mandates include detailed and prescriptive reforms of the firm's compliance program, additional internal oversight requirements for certain contracts, limitations on certain types of contracts or lines of business that present a heightened risk of misconduct, and the installation of an external monitor (Arlen and Kahan 2017, Alexander and Cohen 2015).). Indeed, the settlement agreement may compel the firm to incur the costs of appointing and maintaining an external monitor or facing scrutiny from a regulator beyond what would occur otherwise. To the extent that these interventions genuinely do reduce the risk of wrongdoing, then firms subject to reforms may be less at risk of wrongdoing than would be expected based on disclosed facts at the time of the crime. Moreover, if the mandated reforms lead the firm to adopt internal controls that are substantially above average, news of the criminal settlement and the mandates reforms may lead interested outsiders to conclude that they are less likely to be harmed by the firm in question than by the average firm, whether the reforms are imposed through a DPA or a plea.[62]

[62] While modern criminal settlement agreements now regularly include an explicit discussion of voluntary and mandated reforms, the practice of announcing governance reforms at the news of corporate crime is not new. In her study of reputational damage costs for corporate fraud [convictions][criminal or civil enforcement actions] resolved in {dates), Alexander found that 40 percent of the companies announced new training, audit, and monitoring programs, as well as other reputation-rebuilder actions. Alexander (1999) at 514 (table 4). More recent studies have documented the presence of similar undertakings as mandates in DPAs (Arlen and Kahan 2017).

The inclusion of these reforms strengthens our claim that there is no intrinsic reason why pleas and DPAs should impose differential reputational damage costs. A prosecutors' decision to employ a plea or DPA need not influence the type of mandates imposed. Thus, a prosecutor who concludes that a firm has a heightened risk of misconduct can in theory impose mandates that reduce this risk. A prosecutor can impose such mandates through either a DPA or a plea.

As a result, even if there is a set of cases where prosecutors predictably require the firm to plead guilty if the prosecutor concludes that the firm has an enhanced risk of future misconduct, interested outsiders may not expect convicted firms to be more likely to harm them in the future if prosecutors impose mandates that reduce this risk. Indeed, if the voluntary and mandated reforms associated produced firms with above average internal governance, interested outsiders might be more willing to deal with the firm than previously, as explained above. Of course, this would not necessarily imply that criminal settlements with mandates lower reputational damage costs. Mandated reforms can be costly and these costs are properly attributable to reputational damage costs to the extent that they operate to assuage outsiders' concerns (see Alexander 1999). Yet reforms should be able to lower total reputational damage costs. And, more important, there is no intrinsic reason for concluding that the pleas intrinsically impose higher reputational damage costs than DPAs when both types of agreements can be accompanied by internal governance altering reforms.

4.5. Summary: What do Outsiders learn from Conviction about the Risk of a Repeat Offense?

From our review of plea and DPA agreements and the institutional structures surrounding the decision to convict, we conclude that conviction does not, in and of itself, produce higher reputational damage costs than DPAs because interested outsiders should not expected a convicted firm to be more likely to commit a crime in the future than one subject to a DPA.

We explored three possible ways in which conviction might affect interested outsider's beliefs about dealing with a firm in the future: direct revelation, prosecutorial selection, and management selection.[63] We concluded that none of them provide a reason for interested outsiders to conclude that convicted firms have a higher risk of future misconduct that those subject to a DPA. The decision to convict does not trigger enhanced reputational damage, even if many public facts about convicted firms signal increased risk, because the facts the prosecutor can reveal about a case are independent of the decision to convict. These public facts will produce the same reputational damage

[63] Observe that the prosecutorial selection and managerial selection channels could not be used to support a policy favoring conviction in virtually all situations, as advocated by some (Uhlmann 2013), because conviction only produces an enhanced reputational cost attributable to prosecutor or managerial selection when prosecutors regularly select between conviction and DPAs, employing the latter for criminal settlements involving for firms that are less likely to be repeat violators. By contrast, in a regime in which almost all firms are convicted, the decision to convict provides little information beyond that contained in the new release of the charges filed and the facts of the crime.

cost, regardless of the choice of settlement form.

We consider two reasons to reject this conclusion: the possibility that the choice of settlement form reveals that the firm is worse than the public facts appear to suggest. Examining prosecutors' enforcement policy, we see no basis for concluding that the unstated considerations influencing prosecutors' decisions correlate with the factors that signal a higher risk of future misconduct. Moreover, we note that prosecutors observing a higher risk have no reason to push for a plea because they can as easily achieve their ultimate goals through a DPA that imposes risk-reducing. Similarly, holding constant the public disclosure about the firm, crime, charges, and sanctions, we find that the factors that might lead management to accede to a guilty plea instead of taking other actions do not correlate with the firm's risk of future misconduct. If we allow for variation in sanctions, management selection also should not lead to pleas with enhanced reputational damage costs, as long as prosecutors are faithful agents and do not accept management-friendly terms simply to obtain a guilty plea. The possibility of such deals argues against placing strong pressure on prosecutors to resolve actions through pleas.

Finally, we conclude interested outsiders gain a clearer signal of future risk (at the moment of the settlement negotiation) from a prosecutor's decision whether to impose enhanced mandates. Whether this signal translates into a signal that they should steer away from the firm or towards it will depend on whether interested outsiders expect the voluntary and mandated reforms to be effective in lowering the firm's risk of future misconduct—either to prior beliefs or below.

Thus, we conclude there is nothing intrinsically more stigmatizing about a corporate conviction given existing federal enforcement policy, if stigma is measured in terms of the reputational damage cost to the firm. This conclusion begs the question of why firms appear to care about whether they are convicted—and, in turn, whether those reasons have any bearing on reputational damage costs. We observe that there are reasons to expect that firms do not always care – at least not enough to agree to more onerous terms in order to avoid a plea. Examining the implication of conviction versus DPA it appears that the primary factor that motivates firms to resist a plea is if whether conviction could trigger collateral penalties, in the United States or elsewhere, now or in the future. Thus, it is likely that the firm's apparent preference for DPA is driven by both the threat of identified collateral sanctions, and the risk that the firm may be blocked from pursuing future business opportunities, in an as-of-yet unidentified jurisdiction, by collateral penalties.

Of course, some forms of collateral penalties—such as those imposed by many independent federal agencies—are a form of reputational damage cost. They are the process through which federal agencies protect themselves, or the markets under their jurisdiction, from firms that present an excessive risk of harming others. Accordingly, in order to fully redress the question of whether conviction triggers—and is needed to trigger--greater reputational damage costs, we must next consider whether agencies that employ collateral penalties to guard against future harm predicate their decision to impose collateral sanctions on the simple fact of whether the firm was convicted or subject to a DPA.

5. Collateral Consequences

*[*Section 5 is not yet written. *In this section we will discuss reputational damage costs imposed by federal agencies through the use of collateral consequences. These collateral consequences often are "mandatory" when the firm is convicted. Accordingly, this might suggest that government imposed reputational damage costs and clearly higher if the firm is convicted. In this section, we will show that even in this situation the key determinant of reputational damage cost is the risk of future harm, and not whether the firm is convicted. This is the case for several reasons.*

1) Convictions does not necessarily trigger collateral penalties even when an agency in theory imposes them for two reasons. First, prosecutors can (and do) structured pleas to avoid them. Second, agencies that impose "mandatory" collateral penalties have a process for waiving them. Waiver considerations commonly focus on criteria indicative of the future risk of wrongdoing.

2) DPAs do not eliminate the risk of collateral penalties. When crimes involve (are against the interests of) a federal agency, that agency often will have civil enforcement power. These civil enforcement actions can trigger –or coincide with—administrative actions to impose collateral penalties, whether the prosecutor used a plea or not. These penalties are designed to focus on firms with an enhanced risk of future misconduct.

Of course, the system does not work perfectly. Agencies may well be more likely to impose collateral penalties following a conviction, even if they have no evidence that the firm has a greater risk of future harm. This possibility does not argue in favor of conviction producing superior reputational damage costs, but against it. Since pleas are not a signal that the firm intrinsically has a higher risk of future misconduct, agencies would be more inclined to impose collateral sanctions on convicted firms—holding all else constant—only if the waiver process fails to properly lift penalties off of firms that do not present an enhanced risk. If this is the case, then pleas would impose enhanced cost that are the product of consideration other than those appropriate to reputational damage. Pleas would not enhance deterrence but would instead distort sanctions.]

6. Conclusion

[forthcoming]

References

Alexander, Cindy R. (1999), On the Nature of the Reputational Penalty for Corporate Crime: Evidence, *Journal of Law and Economics*, **42,** 489-526.

Alexander, Cindy R. (2004), Corporate Crime, Markets, and Enforcement: A Review, in Hans Sjogren and Goran Skogh (eds),, *New Perspectives on Economic Crime*, Northampton, MA: Edward Elgar Publishing.

Alexander, Cindy, Jennifer Arlen, and Mark A. Cohen (1999), Regulating Corporate Criminal Sanctions: Federal Guidelines and the Sentencing of Public Firms, *Journal of Law and Economics*, **42,** 393-35.

Alexander, Cindy R. and Mark A. Cohen (1996), New Evidence on the Origins of Corporate Crime, *Managerial and Decision Economics*, **17,** 421-435.

Alexander, Cindy R. and Mark A. Cohen (1999), Why Do Corporations Become Criminals? Ownership, Hidden Actions, and Crime as an Agency Cost, *Journal of Corporate Finance*, **5,** 1-34.

Arlen, Jennifer (1994), The Potentially Perverse Effects of Corporate Criminal Liability, *Journal of Legal Studies*, **23,** 833-67.

Arlen, Jennifer (2009), The Story of Allis-Chalmers, Caremark, and Stone: Directors' Evolving Duty to Monitor, in J. Mark Ramseyer (ed.),, *Corporate Stories*, New York: Foundation Press, 323–346.

Arlen, Jennifer (2012a), *Corporate Criminal Liability: Theory and Evidence*, Section 1, *in* RESEARCH HANDBOOK ON CRIMINAL LAW (Keith Hylton and Alon Harel, eds.), (2012).

Arlen, Jennifer (2012b), The Failure of the Organizational Sentencing Guidelines, *University of Miami Law Review*,**66,** 321-362 (symposium issue),.

Arlen, Jennifer (2016), Prosecuting Beyond the Rule of Law: Corporate Mandates Imposed Through Pretrial Diversion Agreements, *Journal of Legal Analysis*.

Arlen, Jennifer and William Carney (1992), Vicarious Liability for Fraud on Securities Markets: Theory and Evidence, *University of Illinois Law Review* 691-740.

Arlen, Jennifer and Marcel Kahan Corporate Regulation Through Non-Prosecution, *University of Chicago Law Review* (forthcoming 2017).

Arlen, Jennifer and Reinier Kraakman (1997), Controlling Corporate Misconduct: An

Analysis of Corporate Liability Regimes, *New York University Law Review*, **72,** 687-779.

Bar-Isasc and Tadelis, (2008)

Beale, Sara Sun and Adam G. Safwat (2005), What Developments in Western Europe Tell Us About American Critiques of Corporate Criminal Liability, *Buffalo Criminal Law Review*, **8,** 89-164.

Baer, Miriam (2008b), Linkage and the Deterrence of Corporate Fraud, *Virginia Law Review*, **98,** 1295-1365.

Baer, Miriam (2009), Governing Corporate Compliance, *Boston College Law Review*, **50,** 949-1019.

Becker, Gary (1968), Crime and Punishment: An Economic Approach, *Journal of Political Economy,* **76,** 169-217.

Becker, Gary and George Stigler (1974), Law Enforcement, Malfeasance, and the Compensation of Enforcers, *Journal of Legal Studies*, **3,** 1-18.

Block, Michael K. Frederick C. Nold, and J. Greg Sidak (1981), The Deterrent Effects of Antitrust Enforcement, *Journal of Political Economy*, **89,** 429-45.

Block, Michael (1991), Optimal Penalties, Criminal Law, and the Control of Corporate Behavior, *Boston University Law Review*, **71,** 395-420.

Buell, Samuel W. (2006), The Blaming Function of Entity Criminal Liability, *Indiana Law Journal*, **81**, 473-537.

Buell, Samuel W. (2007), Criminal Procedure Within the Firm, *Stanford Law Review*, **59,** 1613-1670.

Coase, Ronald (1960), The Problem of Social Cost, *Journal of Law and Economics*, 3, 1-44.

Cohen, Mark (1991), Corporate Crime and Punishment: An UDPAte on Sentencing Practice in the Federal Courts, 1988-1990, *Boston University Law Review*, **71,** 247-80.

Cohen, Mark (1992), Environmental Crime and Punishment: Legal/Economic Theory and Empirical Evidnece on Enforcement of Federal Environmental Statutes, *Journal of Law and Economics*, 30, 23-51.

Cohen, Mark (1996), Theories of Punishment and Empirical Trends in Corporate

Criminal Sanctions, *Managerial and Decision Economics*, **17,** 399-412.

Cohen, Mark and Sally S. Simpson (1997), The Origins of Corporate Criminality: Rational Individual and Organizational Actors, in William S. Lofquist, Mark A. Cohen, and Gary A. Rabe, (eds.),, *Debating Corporate Crime: An Interdisciplinary Examination of the Causes and Control of Corporate Misconduct*, Cincinnati: Anderson Publishing.

Diamond, Peter (1989),

Dybig and Spatt (198X),

Dyck, Alexander, Adair Morse, and Luigi Zingales (2010), Who Blows the Whistle on Corporate Fraud? *Journal of Finance*, **65,** 2213-2254.

Fischel, Daniel and Alan Sykes (1996), Corporate Crime, *Journal of Legal Studies*, 25**,** 319-50.

First, Harry (2010), Branch Office of the Prosecutor: the New Role of the Corporation in Business Crime Prosecutions, *North Carolina Law Review*, 89, 23-98.

Fudenberg and Levine (1989),

Garrett, Brandon L. (2007), Structural Reform Prosecution, *Virginia Law Review*, **93,** 853-958.

Garrett, Brandon L. (2011), Globalized Corporate Prosecutions, *Virginia Law Review*, **97**, 1775-XXX.

Garrett, Brandon L. (2014), TOO BIG TO JAIL

Garrett, Brandon L. (2015), The Corporate Criminal as Scapegoat, *Virginia Law Review*, 102, 1789-XXX.

Helland, Eric (2006), Reputational Penalties and the Merits of Class-Action Securities Litigation, *Journal of Law and Economics*, 49, 365-95.

Holder, Eric (1999), Memorandum from Eric Holder, Deputy Attorney General, U.S. Dep't of Justice, to Heads of Department Components and United States Attorneys (June 16, 1999),.

Karpoff, Jonathan M., Anup Agrawal, and Jeffrey Jaffe (1999), Management Turnover and Corporate Governance Changes Following the Revelation of Criminal Fraud, *Journal of Law and Economics*, **62,** 309-342.

Karpoff, Jonathan M., D. Scott Lee, and Valaria P. Vendrzyk (1999), Defense

Procurement Fraud, Penalties, and Contractor Influence, *Journal of Political Economy*, **107,** 809-42.

Karpoff, Jonathan M., D. Scott Lee, and Gerald S. Martin (2008a), Cost to Firms of Cooking the Books, *Journal of Financial and Quantitative Analysis*, **43,** 581-612.

Karpoff, Jonathan M., D. Scott Lee, and Gerald S. Martin (2008b), The Consequences to Managers for Financial Misrepresentation, *Journal of Financial Economics*, **43,** 193-215.

Karpoff, Jonathan M. and John R. Lott, Jr. (1993), The Reputational Penalty Firms Bear From Committing Fraud, *Journal of Law and Economics*, **36,** 757-802.

Karpoff, Jonathan M., John R. Lott, Jr., and Eric Wehrly (2005), The Reputational Penalties for Environmental Violations: Empirical Evidence, *Journal of Law and Economics*, **68,** 653-75.

Khanna, Vikramaditya (1996), Corporate Criminal Liability: What Purpose Does it Serve? *Harvard Law Review,* **109,** 1477-534.

Khanna, Vikramaditya and Timothy L. Dickinson (2007), The Corporate Monitor: The New Corporate Czar, *Michigan Law Review*, **105,** 1713-44.

Klein, Benjamin and Keith B. Leffler (1981), The Role of Market Forces in Assuring Contractual Performance, *Journal of Political Economy* **89**, 615-XXX.

Kreps and Wilson (1982),

Lott, Jonathan, Jr. (1996), The Level of Optimal Fines to Prevent Fraud When Reputations Exist and Penalty Clauses Are Unenforceable, *Managerial and Decision Economics*, **17,** 363-80.

MacLeod, W. Bentley ( ). *Journal of Economic Literature*

Mailath and Samuelson,

Maximovic and Titman. Reputation paper.

Milgrom, Paul and John Roberts (1982), *Journal of Economic Theory*

Rhee and Haunschild (2006),

Shapiro, Carl (1983), Premiums for High Quality Products as Returns to Reputations, *Quarterly Journal of Economics,* **98**, 659-XXX

Smith, N. Craig, Sally S. Simpson and Chun-Yao Huang (2007), Why Managers Fail to do the Right Thing: An Empirical Study of Unethical and Illegal Conduct, *Business Ethics Quarterly*, **17**, 633-67.

Tirole,

Tyler, Tom R., and Steven L. Blader (2005), Can Business Effectively Regulate Employee Conduct? The Antecedents of Rule Following in Work Settings, *Academy of Management Journal*, **48,** 1143-58.

Uhlmann, David M. (2013), Deferred Prosecution and Non-Prosecution Agreements and the Erosion of Corporate Criminal Liability, *Maryland Law Review*, 72, 1295-XXX.

Weissmann, Andrew (2007), A New Approach to Corporate Criminal Liability, *American Criminal Law Review*, **44,** 1319-42.

White, Mary Jo (2005), Interview with Mary Jo White, 19 Corp. Crime Rep. 48 (2005), http://www.corporatecrimereporter.com/maryjowhiteinterview010806.htm